

RESEARCH REPORT

Community Reinvestment Act Modernization

Comments on the May 2022 Notice of Proposed Rulemaking

Laurie Goodman Linna Zhu Jun Zhu Ellen Seidman
John Walsh Janneke Ratcliffe

August 2022





ABOUT THE URBAN INSTITUTE

The Urban Institute is a nonprofit research organization that provides data and evidence to help advance upward mobility and equity. We are a trusted source for changemakers who seek to strengthen decisionmaking, create inclusive economic growth, and improve the well-being of families and communities. For more than 50 years, Urban has delivered facts that inspire solutions—and this remains our charge today.

Copyright @ August 2022. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute. Cover image by Tim Meko.

Contents

Acknowledgments	IV
Community Reinvestment Act Modernization	1
We Support the Separation of Low-Income and Moderate-Income Communities and	l Borrowers in
the Retail Lending Test for Mortgages	2
The Benchmarks and Evaluation Framework of the Retail Lending Test for Closed-E	nd Mortgages Is
Promising but Needs Revision	11
The Impact of Product Types on Retail Lending Tests	15
Retail-Based Assessment Areas: Add an MSA Market Share Test	18
Special Purpose Credit Programs	23
Public Data to Be Released: More Data and More Clarity Are Needed	24
Conclusion	26
Appendix	27
Notes	41
References	43
About the Authors	44
Statement of Independence	47

Acknowledgments

This report was supported by the Housing Finance Innovation Forum, a group of organizations and individuals that support high-quality independent research that informs evidence-based policy development. Much of the empirical work that was incorporated in this report was funded by the National Association of Affordable Housing Lenders. We are grateful to the Housing Finance Innovation Forum, to the National Association of Affordable Housing Lenders, and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

V ACKNOWLEDGMENTS

Community Reinvestment Act Modernization

The Community Reinvestment Act (CRA) was enacted in 1977 as one of a series of civil rights laws. The immediate impetus for the law was bank "redlining," the practices of denying loans, especially mortgage loans, to communities—predominantly minority or immigrant—regarded as "high risk." In enacting the CRA, Congress found that "[banks] have [a] continuing and affirmative obligation to help meet the credit needs of the local communities in which they are chartered." In turn, banking regulators are to "assess the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of such institution."

The most recent major revision of the CRA regulations occurred in 1995. Since 1977, when the statute was enacted, and even since 1995, there have been major changes in the banking industry, including consolidation and the development of internet and mobile banking. We applaud the three bank regulators' coming together to modernize and strengthen the regulations. The notice of proposed rulemaking (NPR), released in May 2022,⁴ though complex, appears well designed to expand access to credit, investment, and basic banking services in all communities banks serve and to increase clarity, consistency, and transparency for banks, regulators, and the public. We are particularly pleased to see the separation of community development financing from retail lending.

We appreciate the opportunity to comment on this NPR, which proposes extensive revisions to the regulations implementing the CRA. We focus our comments on three areas of the NPR about which we have done substantial quantitative analysis. In the next section, we comment on the separate consideration of low-income and moderate-income communities and borrowers in the retail lending test for mortgages. Then, we analyze the impact of the retail lending benchmarks and related evaluation framework for closed-end mortgage lending. Next, we discuss (1) whether purchase loans and refinance loans should have separate retailing lending tests, (2) whether non-owner-occupied loans should be excluded from the retail lending test, and (3) whether multifamily lending should be included in the retail lending tests. We then comment on the number of retail lending assessment areas the NPR would impose on both mortgage and small business lending. We close with brief comments on special purpose credit programs and the public availability of data related to the CRA.

We Support the Separation of Low-Income and Moderate-Income Communities and Borrowers in the Retail Lending Test for Mortgages

Our analysis of Home Mortgage Disclosure Act (HMDA) and American Community Survey (ACS) data strongly supports the positive impact of separating low-income and moderate-income neighborhoods and borrowers in evaluating banks' lending. This will enable banks, regulators, and communities to better understand how banks are serving the communities on which their mandate under the CRA is explicitly focused. Thus, we support and applaud the change made in the NPR.

Under current CRA regulations, banks are evaluated on their service to low- and moderate-income (LMI) neighborhoods and LMI borrowers. The NPR proposes to evaluate banks on their lending to the low-income and moderate-income categories separately for both neighborhoods and borrowers. We support this separation because it acknowledges the fundamental differences between low-income and moderate-income neighborhoods and low-income and moderate-income borrowers with respect to how much they are underserved and their racial composition.

Mortgage Lending Is Scarce in Low-Income Neighborhoods and for Low-Income Borrowers, Particularly in Low-Income Predominantly Minority Neighborhoods and for Low-Income Minority Borrowers

Table 1 compares the share of total mortgage loans (by all lenders) in the US in 2018 and 2019 with the share of census tracts (or neighborhoods) in each racial and income category. Low-income neighborhoods as a whole constitute 7.9 percent of all census tracts but receive only 2.2 percent of total mortgage loans. Moreover, mortgage lending in low-income predominantly minority neighborhoods is particularly scarce; these neighborhoods receive only 1.1 percent of loans even though they make up 4.9 percent of total tracts. (We define a predominantly minority neighborhood as one in which the nonwhite share of households is greater than 70 percent.) Moderate-income neighborhoods as a whole do somewhat better; they receive 14.3 percent of loans originated and make up 22.4 percent of tracts. But predominantly minority moderate-income neighborhoods still lag; they receive only 3.2 percent of loans originated but make up 7.3 percent of tracts.

Similarly, at the borrower level, while 28.0 percent of households, including 11.6 percent of minority households, have low incomes, they receive only 8.0 percent and 2.5 percent of mortgage loans, respectively (table 2). In contrast, moderate-income borrowers, including moderate-income

minority borrowers, do much better: 17.7 percent of households, including 6.2 percent of minority households, have moderate incomes, and they receive 19.8 percent and 5.8 percent of mortgage loans, respectively.

TABLE 1
Share of Mortgage Loans and Tracts, by Neighborhood Income and Race

	Low-income neighborhoods	Moderate- income neighborhoods	LMI neighborhoods	All neighborhoods
Share of total mortgage loans				
Predominantly minority neighborhoods	1.1%	3.2%	4.3%	8.1%
Mixed neighborhoods	0.9%	5.7%	6.5%	25.6%
Predominantly white neighborhoods	0.2%	5.4%	5.7%	66.3%
All neighborhoods	2.2%	14.3%	16.5%	100.0%
Share of census tracts				
Predominantly minority neighborhoods	4.9%	7.3%	12.1%	16.5%
Mixed neighborhoods	2.3%	8.1%	10.4%	26.5%
Predominantly white neighborhoods	0.7%	7.0%	7.7%	57.0%
All neighborhoods	7.9%	22.4%	30.3%	100.0%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data

Notes: LMI = low- and moderate-income. The data refer to closed-end loans for one-to-four-unit single-family homes. These are national-level data. A predominantly minority neighborhood is a census tract in which the nonwhite share of households is greater than 70 percent, a mixed neighborhood is one in which the nonwhite share is 30 to 70 percent, and a predominantly white neighborhood is one in which the nonwhite share is less than or equal to 30 percent.

TABLE 2
Share of Mortgage Loans and Households, by Income and Race

	Low-income borrowers	Moderate-income borrowers	LMI borrowers	All borrowers
Share of total mortgage lending				
Minority borrowers	2.5%	5.8%	8.2%	26.1%
White borrowers	5.5%	14.0%	19.5%	73.9%
All borrowers	8.0%	19.8%	27.7%	100.0%
Share of households				
Minority households	11.6%	6.2%	17.8%	33.0%
White households	16.5%	11.4%	27.9%	67.0%
All households	28.0%	17.7%	45.7%	100.0%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

Notes: LMI = low- and moderate-income. The data refer to closed-end loans for one-to-four-unit single-family homes. These are national-level data.

A Significantly Greater Percentage of Low-Income Neighborhoods Are Predominantly Minority Than Is the Case for Moderate-Income Neighborhoods

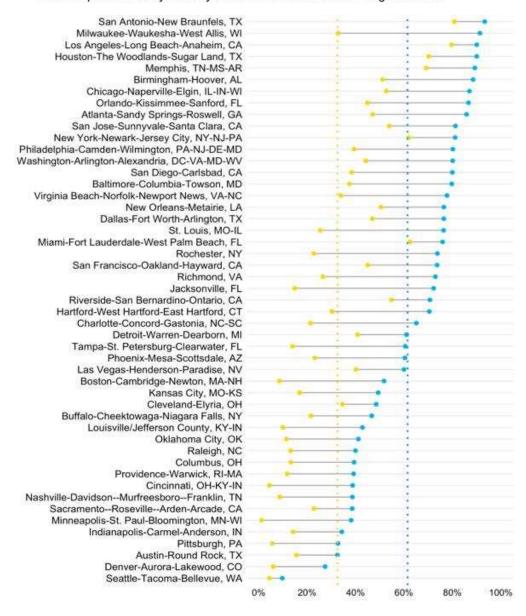
Most low-income neighborhoods (4.9 / 7.9 = 62 percent) are predominantly minority, whereas only one-third of moderate-income neighborhoods (7.3 / 22.4 = 32 percent) are predominantly minority (table 1). This reflects a significant difference in the racial composition of low-income and moderate-income neighborhoods. More importantly, this difference is pervasive, affecting most metropolitan areas. For all but a few of the 100 largest metropolitan statistical areas, from the largest (figure 1A) to the smallest (figure 1B), low-income neighborhoods have a greater overlap with predominantly minority neighborhoods than do moderate-income neighborhoods.

FIGURE 1A

Share of Predominantly Minority Neighborhoods out of Low-Income and Moderate-Income Neighborhoods, at the MSA Level

Tier 1

- Share of predominantly minority tracts in low-income neighborhoods
- Share of predominantly minority tracts in moderate-income neighborhoods



URBAN INSTITUTE

Source: 2015-19 American Community Survey data.

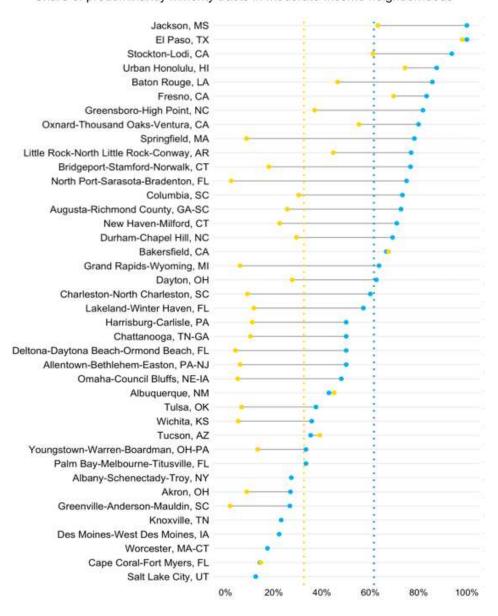
Notes: MSA = metropolitan statistical area. A predominantly minority tract is a census tract in which the nonwhite share of households is greater than 70 percent. The figure includes the 100 most-populous MSAs. Population tier is classified by the descending ranking of the number of households in each MSA. The vertical yellow and blue lines reflect the national share of predominantly minority tracts in, respectively, moderate-income and low-income neighborhoods.

FIGURE 1B

Share of Predominantly Minority Neighborhoods out of Low-Income and Moderate-Income Neighborhoods, at the Metropolitan Statistical Area Level

Tier 2

- Share of predominantly minority tracts in low-income neighborhoods
- Share of predominantly minority tracts in moderate-income neighborhoods



URBAN INSTITUTE

Source: 2015-19 American Community Survey data.

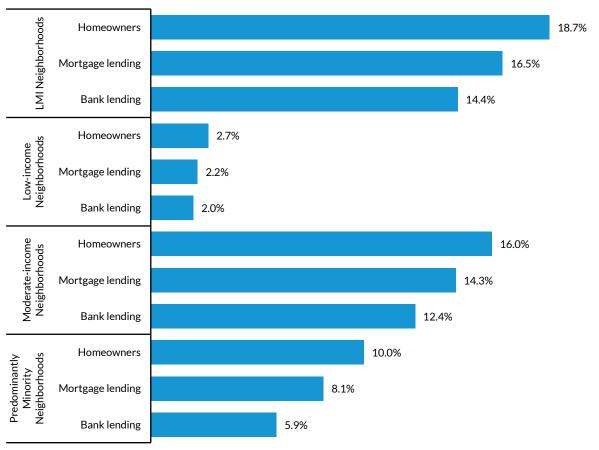
Notes: MSA = metropolitan statistical area. A predominantly minority tract is a census tract in which the nonwhite share of households is greater than 70 percent. The figure includes the 100 most-populous MSAs. Population tier is classified by the descending ranking of the number of households in each MSA. The vertical yellow and blue lines reflect the national share of predominantly minority tracts in, respectively, moderate-income and low-income neighborhoods.

In contrast to neighborhoods (table 2), total mortgage lending and bank lending to low-income and moderate-income borrowers is not highly differentiated by race (i.e., minority borrowers receive about 30 percent of loans to low-income, moderate-income, and LMI borrowers).

Low-Income, Moderate-Income, and Predominantly Minority Neighborhoods Receive Less Than Their Proportionate Share of Mortgage Lending, Especially Bank Lending

In figure 2, we compare the homeowner share, total mortgage lending by both banks and nonbanks, and mortgage lending by banks only (bank lending) in low-income, moderate-income, and LMI neighborhoods. We also show the same comparison for predominantly minority neighborhoods. In all cases, overall lending is lower than the current homeowner share, and nonbanks consistently outperform banks. Compared with the current homeowner share (2.7 percent), low-income neighborhoods receive only 2.2 percent of mortgage loans and 2.0 percent of bank loans. Moderate-income neighborhoods have a 16.0 percent homeownership share and receive 14.3 percent of mortgage loans and 12.4 percent of bank mortgage loans. Predominantly minority neighborhoods (taking low- and moderate-income neighborhoods together) have a 10.0 percent homeownership share but receive only 8.1 percent of mortgages and 5.9 percent of bank loans.

FIGURE 2
Homeowner Share, Mortgage Lending, and Bank Mortgage Lending, by Neighborhood Income and Race



URBAN INSTITUTE

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

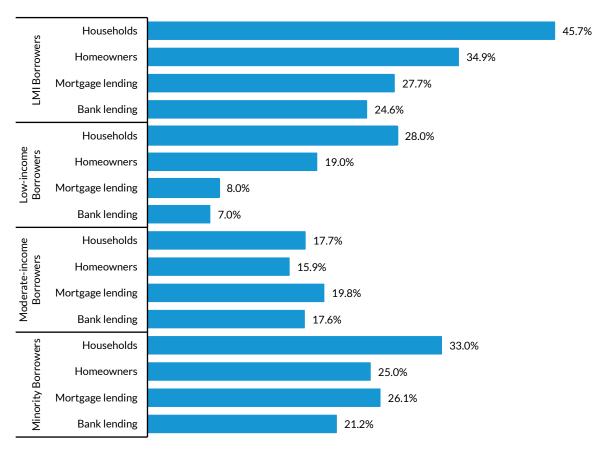
Notes: LMI = low- and moderate-income. The data refer to closed-end loans for one-to-four-unit single-family homes.

Mortgage Lending to Low-Income Borrowers Falls Well Short of Benchmarks Using Both Their Shares of Households and Homeowners

Figure 3 compares the shares of households and homeowners by income category with the share of mortgage lending and with the share of bank lending. Bank lending to low-income borrowers (7.0 percent) is less than overall lending (8.0 percent), and both these shares are well short of the homeowner share (19.0 percent). All these figures pale compared with the overall share of low-income households (28.0 percent). For moderate-income borrowers, bank lending (17.6 percent) is approximately the same as the share of moderate-income households (17.7 percent) and is higher than

the share of moderate-income homeowners (15.9 percent). Nevertheless, bank lending lags overall mortgage lending to moderate-income borrowers (19.8 percent), indicating that nonbanks are significantly outperforming banks in lending to this group.

FIGURE 3
Household Share, Homeowner Share, Mortgage Lending, and Bank Mortgage Lending for Different Borrowers



URBAN INSTITUTE

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data

Note: LMI = low- and moderate-income. The data refer to closed-end loans for one-to-four-unit single-family homes.

Bank Lending Underserves Minority Borrowers, Particularly Black Borrowers

Figure 3 shows that, for minority borrowers, the bank lending share (21.2 percent) is substantially lower than either the homeowner share (25.0 percent) or the mortgage lending share (26.1 percent). Table 3 further breaks down the minority group by race and ethnicity. Among minority households, Black

households were substantially underserved by both banks and nonbanks, with bank lending lagging nonbank lending. Black households constitute 32.6 percent of homeowners in low-income neighborhoods but receive only 17.9 percent of all mortgage loans and 17.4 percent of bank loans. The situation is directionally similar in moderate-income neighborhoods. Our earlier research showed that this underrepresentation of Black borrowers persists across almost all major metropolitan areas. Turning to other racial and ethnic groups, Asian and, to a lesser extent, Hispanic borrowers are served more in line with their current homeowner share, though bank lending to Hispanic households significantly lags nonbank lending. Moreover, current homeownership rates for these two groups are probably low estimates of homeownership potential, given the age distribution of the Hispanic and Asian populations (Goodman et al. 2021).

TABLE 3
Household Share, Homeowner Share, and Mortgage Lending, by Income, Race, and Ethnicity

			All mortgage	Bank-only mortgage	Nonbank mortgage
	Households	Homeowners	lending	lending	lending
Low-income neighborhoods					
Black borrowers	36.5%	32.6%	17.9%	17.4%	18.2%
Hispanic borrowers	27.5%	23.4%	25.0%	19.8%	27.7%
Asian borrowers	4.4%	4.2%	8.2%	10.0%	7.3%
Other borrowers	3.2%	2.7%	1.6%	1.5%	1.7%
Moderate-income neighborhoods					
Black borrowers	20.3%	15.6%	11.3%	9.8%	12.0%
Hispanic borrowers	22.0%	18.3%	20.3%	15.4%	22.7%
Asian borrowers	4.3%	3.9%	5.8%	6.8%	5.4%
Other borrowers	3.2%	2.6%	1.6%	1.5%	1.7%
LMI neighborhoods					
Black borrowers	23.9%	18.0%	12.2%	10.9%	12.8%
Hispanic borrowers	23.2%	19.0%	21.0%	16.0%	23.3%
Asian borrowers	4.3%	3.9%	6.1%	7.2%	5.6%
Other borrowers	3.2%	2.6%	1.6%	1.5%	1.7%
All neighborhoods					
Black borrowers	11.9%	7.9%	6.6%	4.9%	7.6%
Hispanic borrowers	13.2%	9.8%	11.8%	8.1%	14.0%
Asian borrowers	4.7%	4.4%	6.2%	6.9%	5.8%
Other borrowers	2.5%	2.0%	1.4%	1.3%	1.5%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

Notes: LMI = low- and moderate-income. The data refer to closed-end loans for one-to-four-unit single-family homes.

In short, both demographics and lending patterns are different for low-income and moderate-income neighborhoods and borrowers. This strongly supports the proposal in the NPR to consider each of the four groups separately. Moreover, when combined with information about race from the Home

Mortgage Disclosure Act,⁷ the more granular information can focus attention on how race affects lending to each of the four groups.

It is important to recognize, however, that even though the proposal would separate evaluation of bank lending in low-income and moderate-income neighborhoods and to low-income and moderate-income borrowers in calculating a bank's CRA rating, the retail lending tests would ultimately put the scores together, weighting by the population of potential borrowers. Weighting by the population of potential borrowers enables regulators to account for the different capacities for homeownership in low- and moderate-income communities and among low- and moderate-income borrowers. But it is critical to measure the proportion of potential borrowers properly, and we are concerned that a total household measurement with respect to borrowers overstates the number of potential borrowers, especially low-income borrowers.

The Benchmarks and Evaluation Framework of the Retail Lending Test for Closed-End Mortgages Is Promising but Needs Revision

In general, we think the proposed evaluation framework is promising. Nevertheless, our analysis suggests the need for some revisions to the benchmarks, at least for closed-end mortgage loans.

One of the NPR's most innovative features is its proposal to establish specific product and geographic benchmarks against which bank retail lending performance would be evaluated. These benchmarks would change over time as demographic and market conditions changed. There are two major sets of benchmarks: community benchmarks and market benchmarks. The community benchmarks are designed to be a proxy for lending potential in a particular product line in each census tract; the market benchmark is based on current lending in that product line (by all lenders, not just banks) in the tract.

We follow the NPR's data sources (HMDA and ACS) and methodology and explore how the benchmarks are likely to work at both the national and the MSA levels. Using the entire universe of closed-end mortgage loans for 2018–19, we analyze the performance of the home mortgage industry as a whole, rather than the individual banks to which the regulation will ultimately be applied. Although the results with respect to each bank in each MSA will differ from our industry-wide results, our analysis provides directional information about both the challenges of applying the regulation and the likely

results, which we discuss below. Our detailed results at the MSA level are included in appendix tables A.1 through A.5.

The Home Mortgage Industry as a Whole Performs Exceptionally Badly with Respect to Low-Income Borrowers

Table 4 summarizes the performance grades the industry as a whole would receive on the closed-end mortgage retail lending test, using the proposed evaluation framework. Of 354 MSAs, 126 MSAs (or 36 percent) would receive a "needs to improve" rating and 222 MSAs (or 63 percent) would receive a "low satisfactory" rating. Although directionally this is not a surprise, the extent of the poor performance is extreme. Moreover, for low-income borrowers, the community benchmark was never binding, meaning mortgage lending as a whole (both banks and nonbanks) is performing exceptionally badly against the community's credit needs.

TABLE 4
MSA-Level Results on the Closed-End Mortgage Retail Lending Test

	Geographic Dis	stribution Metric	Borrower Distribution Metric			
Low-income neighborhoods		Moderate-income neighborhoods	Low-income borrowers	Moderate-income borrowers		
Share of MSAs				_		
Needs to improve	11%	2%	36%	4%		
Low satisfactory	39%	65%	63%	28%		
High satisfactory	19%	20%	1%	17%		
Outstanding	31%	12%	1%	51%		
Total share	100%	100%	100%	100%		
Number of MSAs						
Needs to improve	34	8	126	13		
Low satisfactory	116	233	222	99		
High satisfactory	56	72	4	60		
Outstanding	93	44	2	182		
Total count	299	357	354	354		

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

Note: MSA = metropolitan statistical area. The data refer to closed-end loans for one-to-four-unit single-family homes. The performance rating is determined by the lower of the calibrated market benchmark and the calibrated community benchmark.

The Proposed Community Benchmark in the Borrower Distribution Metric Sets Thresholds Unattainably High for Low-Income Borrowers

The community benchmark for low- and moderate-income borrowers relates to the share of households in those neighborhoods, whereas for low- and moderate-income neighborhoods, it relates

to the share of homeowners. There is no obvious reason for this distinction. Moreover, the household benchmark is impossibly high for low-income borrowers. We saw this in the national results in the previous section (figure 3): low-income households are 28 percent of all households but receive only 8 percent of overall mortgage lending and 7 percent of bank lending. And although there is some variation by MSA, there is no MSA in which the community benchmark (in contrast to the market benchmark) is binding. Moreover, the effect of using a household benchmark that overweights low-income borrowers is that it underweights the number of potential moderate-income borrowers in calculating the final CRA rating.

But even using the homeowner share as the alternative community benchmark is unsatisfactory. First, there is a significant disparity between homeowners and loans; low-income borrowers make up 19.0 percent homeowners but receive only 8.0 percent of total loans and 7.0 percent of bank loans. In addition, the age distribution of low-income homeowners is heavily skewed to older owners, who likely not only bought their homes many years ago but whose incomes when they bought the homes may well have been higher than they are today. In particular, 37 percent of low-income homeowners are 65 or older, but they constitute 21 percent of new borrowers, suggesting that even a homeowner benchmark would be too high. ¹⁰

The Proposed Evaluation Framework May Create Incentives for Gentrification in Low-Income Communities in Some MSAs

We were initially surprised at the relatively high ratings in low-income communities—in particular, that the industry as a whole would have been rated "outstanding" in 31 percent of the MSAs and "high satisfactory" in another 19 percent (table 4). But looking beneath the aggregate ratings, we find that the "outstanding" rating means different things in different MSAs. In Los Angeles and Nashville, the industry would earn an "outstanding" rating because both the market and banks are outperforming the community benchmark. But in those markets, 57 percent and 46 percent of loans in low-income neighborhoods are going to high-income borrowers with incomes greater than 120 percent of the area median. Similarly, there are 18 predominantly smaller MSAs with very small minority populations that receive an "outstanding" rating at the same time as more than 30 percent of loans in low-income neighborhoods were going to high-income borrowers. Both these results suggest the proposed system may, in some MSAs, create incentives for gentrification. In all, we found 133 MSAs where the share of lending to high-income borrowers in low-income neighborhoods exceeded 30 percent. Among those, 57 MSAs earned "outstanding" ratings, 25 earned "high satisfactory" ratings, 34 earned "low satisfactory" ratings, and 17 earned "needs to improve" ratings.

Selecting the Lesser of the Two Calibrated Benchmarks May Fail to Provide Enough Incentives for Banks to Provide Small-Dollar Loans in Smaller and Less Expensive MSAs

In MSAs where the community benchmark is significantly higher than the market benchmark, the lesser setting will make the market benchmark binding. In fact, in 22 MSAs, the community benchmark is more than 3 percentage points higher than the market benchmark in low-income communities, and in 67 MSAs, the community benchmark is more than 5 percentage points higher than the market benchmark in moderate-income communities. The majority of those markets are small and have affordable home prices. Small-dollar mortgage loans are less profitable for both banks and nonbanks. Hence, evaluating banks' performance on the lesser of the two benchmarks may fail to give banks incentives to provide the small-dollar mortgage loans that would better meet the credit needs of homebuyers in these relatively low-cost low- and moderate-income communities.

That said, the incentives are aligned in many neighborhoods, particularly moderate-income neighborhoods, where the distribution of ratings seems more realistic. Consider a market in which the community benchmark is higher than the market benchmark, which is higher than the amount of bank lending. There are creditworthy borrowers, and this ratings construction may well provide an incentive for banks to improve their performance.

We believe the community benchmarks should be reevaluated. Would different benchmarks and calibrations do a better job of giving banks incentives to improve lending—at least to the level of nonbanks? Our conclusion is that with respect to low-income borrowers, the problems related to homeownership are structural—incomes are too low compared with home prices in many parts of the country—and cannot be solved by lending. Thus the community benchmark is of little value, other than as information. Banks can make improvements, especially in low-cost communities where the lack of small mortgage loans may be more binding than low incomes, but in a broader sense, the challenge is societal.

Nevertheless, the information is useful. The wide disparities in the actual ratings, the likely low weight for low-income neighborhoods and low-income borrowers in an institution's overall CRA rating, and the reasons for the individual ratings highlight what we think is the main value of the information that will be obtained, especially with respect to low-income neighborhoods and low-income borrowers in each assessment area: to enable banks, regulators, and the public to understand what lenders are doing, both absolutely and comparatively, in each neighborhood and with respect to specific groups of borrowers. That can enable communities and banks to have more informed conversations about ways

to improve the distribution of bank lending to low- and moderate-income communities and borrowers and, with the use of HMDA data, to minority households.

The Impact of Product Types on Retail Lending Tests

In this section, we comment on three questions about which products should be included in the retail lending tests.

Should the Agencies Aggregate Closed-End Home Mortgage Loans Used for All Purposes?

The NPR asks whether, in evaluating banks under the retail lending test for mortgages, purchase and refinance loans should be separated. Because the factors driving demand for home purchase loans and home refinance loans vary over time, especially as interest rates change, we analyzed 2018–20 HMDA data to determine the shares of both purchase and refinance loans in low-income and moderate-income neighborhoods and to low-income and moderate-income borrowers.

TABLE 5
Distribution of Purchase, Refinance, and Total Loans, by Neighborhood Income Classification

	Low-income neighborhoods	Moderate-income neighborhoods	Middle-income neighborhoods	Upper-income neighborhoods	All
2018					_
Purchase	2.34%	14.87%	45.18%	37.62%	100.00%
Refinance	2.15%	14.78%	45.81%	37.26%	100.00%
All	2.27%	14.77%	45.47%	37.49%	100.00%
2019					
Purchase	2.40%	14.89%	45.25%	37.46%	100.00%
Refinance	1.83%	12.55%	42.94%	42.68%	100.00%
All	2.17%	13.92%	44.46%	39.45%	100.00%
2020					
Purchase	2.32%	14.43%	45.17%	38.08%	100.00%
Refinance	1.44%	10.36%	40.64%	47.56%	100.00%
All	1.80%	12.00%	42.54%	43.66%	100.00%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–20 Home Mortgage Disclosure Act data.

Table 5 shows the distribution of purchase, refinance, and total loans by neighborhood income bucket by year for 2018 through 2020. 12 Note that the low- and moderate-income neighborhood share of refinance loans is always lower than the share of purchase loans. This difference is larger in heavier

refinance years. Borrowers in low-income neighborhoods in 2018, a low refinance year, received 2.34 percent of purchase originations and 2.15 percent of refinance originations. In 2020, a high refinance year, the borrowers in low-income neighborhoods constitute 2.32 percent of purchase activity and 1.44 percent of refinance activity. The same pattern holds for borrowers in moderate-income neighborhoods. In 2018, a low refinance year, these loans constituted 14.87 percent of purchase originations and 14.78 percent of refinance originations. In 2020, the shares were 14.43 percent of purchase originations and 10.36 percent of refinance originations.

We appreciate that separating the categories would give the banks greater certainty as to the targets they need to meet to achieve a given CRA rating. That is, interest rates can change rapidly, and if rates were to fall rapidly, capacity-constrained banks would refinance their larger, more profitable loans first, potentially leaving institutions shorter on low-income lending than they planned to be. On the other hand, evaluating purchase and refinance loans together may, in a heavy refinance year, provide banks a greater incentive to focus resources on low-income lending than would otherwise be the case. In addition, keeping the categories together avoids adding four more tests to an already complex system. In sum, although we think there is a case to be made for separating purchase and refinance loans, we do not think the benefit outweighs the costs.

Should the Agencies Include Closed-End Non-Owner-Occupied Housing Lending in the Closed-End Home Mortgage Loan Product Category?

We recommend that non-owner-occupied (or investor) loans be excluded from the closed-end mortgage retail lending test. Table 6 shows owner-occupied and non-owner-occupied lending by neighborhood type for 2018 through 2020. Non-owner-occupied lending is far more common in lower-income neighborhoods than in higher-income neighborhoods; 17.5 percent of lending in low-income neighborhoods is to non-owner-occupants, compared with 6.4 percent in upper-income neighborhoods. Bank lending is even more skewed, with 22.3 percent of non-owner-occupied loans going to low-income neighborhoods compared with 8.0 percent in upper-income neighborhoods.

TABLE 6
Owner-Occupied and Non-Owner-Occupied Loan Distribution in Various Neighborhoods, by Income Classification, 2018–20

_	Bank and N	onbank Loans	Bank Loans Only		
	Owner- occupied homes	Non-owner- occupied homes	Owner- occupied homes	Non-owner- occupied homes	
Low-income neighborhoods	82.47%	17.53%	77.71%	22.29%	
Moderate-income neighborhoods	89.14%	10.86%	84.93%	15.07%	
Middle-income neighborhoods	91.92%	8.08%	88.95%	11.05%	
Upper-income neighborhoods	93.61%	6.39%	92.03%	7.97%	
All	92.05%	7.95%	89.63%	10.37%	

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–20 Home Mortgage Disclosure Act data.

Although we understand the rationale for including investor loans—these loans may provide affordable rental housing to low-income communities ¹³—we believe the disproportionate use of investor loans in low-income neighborhoods plus the disproportionate use of investor loans by banks presents a biased picture of bank financing to low- and moderate-income neighborhoods. We therefore recommend non-owner-occupied loans be excluded from consideration under the closed-end mortgage retail lending tests.

Should the Agencies Include Multifamily Loans in the Retail Lending Test?

Multifamily loans are currently included in both the community development test and the retail lending test, but they are measured differently. In the community development test, banks are measured on the amount of affordable housing they finance. In the retail lending test, banks are measured on the number of loans in low- and moderate-income communities. ¹⁴ We suggest removing multifamily lending from the retail lending test.

Both the community and market benchmarks for multifamily lending measure the geography of the loan, without regard to whether the property is affordable to low- and moderate-income households. ¹⁵ As a result, a bank making loans on high-rent multifamily properties in low-income tracts would earn CRA credit for this lending, whereas a bank doing affordable multifamily lending in a middle-income tract, expanding opportunities, would not earn retail credit.

We believe that even if (as would be preferable) performance under the retail lending test were measured by the number of units rather than the number of loans, multifamily lending does not belong in the retail lending test. ¹⁶ We considered whether it made sense to include the number of affordable

units in the retail lending test, but we ultimately rejected it for two reasons. First, the benchmark is not available. HMDA does not measure the number of affordable units in the conventional sense of the word; it measures the number of income-restricted units (i.e., individual dwelling units that have restrictions based on the occupants' income pursuant to restrictive covenants encumbering the property). Second, this measurement would be highly duplicative of the community development financing test.

The community development financing test is intended to capture the share of multifamily lending that is devoted to affordable housing. It includes (1) affordable rental housing developed in conjunction with federal, state, and local government programs; (2) multifamily rental housing with affordable rents; (3) activities supporting affordable low- or moderate-income homeownership; and (4) purchases of mortgage-backed securities (MBS) that finance affordable housing. ¹⁷ Question 9 asks whether "only the proportion of affordable loans" in an MBS should count for the community development financing test; we think that is the appropriate result. ¹⁸ Moreover, we suggest that the proportion of the community development financing test that can be met by MBS be limited to, for example, 25 percent, so that MBS do not crowd out other more impactful forms of community development finance.

Retail-Based Assessment Areas: Add an MSA Market Share Test

The NPR would require banks to establish facility-based assessment areas around their main offices, branches, and deposit-taking remote service facilities, such as ATMs. This is similar to a bank's current assessment areas. For large banks, wholesale banks, and limited-purpose banks, the assessment areas would be MSAs, metropolitan areas, or contiguous counties. Intermediate and small banks could use partial counties, as they do now.

In addition, large banks would be required to delineate retail lending assessment areas (RLAAs) for mortgage and small business lending in areas where they do not have facilities but do a specified amount of lending. These areas would be (1) the entirety of a single MSA, excluding counties inside the bank's facility-based assessment areas, or (2) all the nonmetropolitan counties in a single state, excluding counties inside the bank's facility-based assessment areas, aggregated into a single RLAA. A large bank would be required to delineate an RLAA in any MSA or the combined nonmetropolitan areas of a state, respectively, in which it originated in that geographic area, as of December 31 of each of the

two preceding calendar years: (1) at least 100 home mortgage loans outside its facility-based assessment areas or (2) at least 250 small business loans outside its facility-based assessment areas.

RLAAs are designed to extend evaluation of bank performance to areas in which their market share is meaningful. For some small geographies, 100 mortgage loans or 250 mortgage loans might be significant; for larger areas, however, the impact may be muted. Based on our earlier work, we think the loan count triggers are reasonable but incomplete (Goodman, Seidman, and Zhu 2022). To measure their impact in different geographies, we evaluated both the proposed loan count triggers and the impact of adding 1, 2, and 5 percent market share overlays to the loan counts at the MSA level (or nonmetropolitan areas of a state) before a bank would have to declare an RLAA. When we consider the total lending for a particular geography, we include both bank lending and nonbank lending for mortgages but only bank lending for small business, as nonbank small business lending data are unavailable. Moreover, anecdotal evidence suggests nonbank lending plays a much less significant role in the small business market than in the mortgage market.

Table 7 shows the number of RLAAs using the proposed count cutoffs and our second overlay for home mortgage lending, ²⁰ using 2017 and 2018 HMDA data. If we use only the NPR's proposed loan count threshold, we find that 92 banks meet the 100-loan mortgage threshold outside their facility-based assessment areas and would have at least one RLAA, with a maximum of 121 and a median of 2. In total, banks would have to declare 654 mortgage RLAAs.

TABLE 7
RLAAs, by Thresholds for Mortgage Lending

	Thresholds	Banks	RLLAs	Min.	Max.	Median
Threshold 1	100 loans	92	654	1	121	2
Thresholds 1 and 2	100 loans + 1% MSO	42	214	1	70	1
	100 loans + 2% MSO	22	77	1	24	1
	100 loans + 5% MSO	12	18	1	4	1

Source: Urban Institute calculations from 2017 and 2018 Home Mortgage Disclosure Act data and 2017 and 2018 Federal Financial Institutions Examination Council data.

Note: MSO = market share overlay; RLLA = retail lending assessment area.

Applying a 1 percent market share overlay reduces the number of affected banks from 92 to 42, the number of RLAAs from 654 to 214, and the maximum number of RLAAs any bank would be required to declare from 121 to 70.

TABLE 8
RLLAs, by Thresholds for Small Business Lending

	Thresholds	Banks	RLLAs	Min.	Max.	Median
Threshold 1	250 loans	23	826	1	233	11
Thresholds 1 and 2	250 loans+ 1% MSO	13	717	1	232	16
	250 loans+ 2% MSO	11	622	1	231	8
	250 loans+ 5% MSO	5	440	8	209	32

Source: Urban Institute calculations from 2017 and 2018 Federal Financial Institutions Examination Council data. **Note:** MSO = market share overlay; RLLA = retail lending assessment area.

Imposing a 1 percent market share overlay is not nearly as effective in the case of small business loans (table 8). Such an overlay would reduce the number of banks required to declare RLAAs from 23 to 13, but the number of RLAAs they would have to declare is reduced only from 826 to 717. That is, imposing a market share overlay eliminates the need for 10 banks that would have had to declare a small number of RLAAs based on loan count alone to establish RLAAs, but the overlay has limited effect on the banks that have more RLAAs. And raising the market share threshold from 1 percent to 2 percent does not change the results significantly.

The small business results are subject to several caveats that make the analysis—and potentially the decision to pursue RLAAs for small business loans—ambiguous at this time. Most importantly, the NPR proposes changing the definition of small business loans, and numbers based on the new definition are unavailable. That is, both the empirical work in the NPR and our empirical work rely on the current definition of a small business loan, which is a loan of \$1 million or less. The NPR proposes that the revised CRA regulations use the definition of a small business loan proposed in the Consumer Financial Protection Bureau's (CFPB) proposed regulations under section 1071 of the Dodd-Frank Act (1071

regulations), which is a loan of \$5 million or less.²¹ Moreover, the small number of institutions with a large number of potential RLAAs are banks that are both retail banks and large credit card issuers. Without the benefit of the data the 1071 regulations would provide, it is impossible to separate small business credit cards from other small business lending. Also, the NPR does not propose to require wholesale or limited-purpose banks, many of which are major credit card issuers, to establish RLAAs.

If we overlay a 1 percent market share on the loan count requirement before a bank would be required to declare an RLAA, what impact would this have on evaluating mortgage or small business lending in each MSA? Table 9 shows the lost market share for combined 2017 and 2018 and the number of lost banks, with home mortgage results in table 9A and small business results in table 9B. The full tables for the lost market share analysis are provided in appendix tables A.6 and A.7.

For home mortgages, if we overlay a 1 percent market share requirement, out of 204 MSAs and nonmetropolitan areas of states with banks passing the loan count thresholds, 175 areas would have banks that would not pass the 1 percent market share threshold. But only 4 areas in 2017 and 2018 would have lost more than 5 percent of loans subject to evaluation (table 9A). Moreover, for those 4 areas, the maximum loss of market share is less than 7 percent of their mortgage loans.

For small business loans, only one MSA (Chicago) loses consideration of more than 5 percent of loans made, and the number is less than 7 percent of loans in each year (table 9B). Only one MSA is affected, as the market share overlay does not significantly reduce the number of small business RLAAs.

TABLE 9A

Total Market Share Lost Using 1 Percent Market Share Overlay to Retail Lending Assessment Area Triggers

Home mortgages (lost market share of 5 percent or more)

	Lost loans market share	Market share lost banks 2017	Market share lost banks 2018	Banks passing 100 loans	Banks passing both	Lost banks
Cincinnati, OH-KY-IN	6.4%	5.0%	7.0%	8	1	7
Michigan	6.4%	5.0%	7.0%	11	2	9
Nashville-Davidson-Murfreesboro-Franklin, TN	5.9%	5.0%	7.0%	10	0	10
Ohio	6.5%	7.0%	7.0%	10	0	10

Source: Urban Institute calculations from 2017 and 2018 Home Mortgage Disclosure Act data and 2017 and 2018 Federal Financial Institutions Examination Council data.

TABLE 9B

Total Market Share Lost Using 1 Percent Market Share Overlay to Retail Lending Assessment Area Triggers

Small business (lost market share of 5 percent or more)

		Market share	Market share			
	Lost loans market share	lost banks 2017	lost banks 2018	Banks passing 100 loans	Banks passing both	Lost banks
	marketsnare	2017	2010	100 100113	botti	LOST BUING
Chicago-Naperville-Elgin, IL-IN-WI	5.4%	5.7%	5.1%	13	0	13

Source: Urban Institute calculations from 2017 and 2018 Federal Financial Institutions Examination Council data.

In short, it is reasonable to use RLAAs to better capture bank retail lending beyond the areas around bank facilities. But those additional assessment areas should represent a meaningful amount of lending to the community. We suggest that eliminating areas where the bank does less than 1 percent of the total lending in the MSA or the nonmetropolitan areas in the state makes the RLAAs both more meaningful and less burdensome, particularly in the mortgage arena.

Special Purpose Credit Programs

The NPR asks "whether the regulation should list special purpose credit programs as an example of a responsive credit product or program that facilitates mortgage and consumer lending targeted to low-or moderate-income borrowers." Special purpose credit programs (SPCPs) are a tool established under the Equal Credit Opportunity Act allowing lenders to direct credit to underserved markets. SPCPs permit lenders to extend credit under any program "expressly authorized by Federal or state law for the benefit of an economically disadvantaged class of persons" and specifically permit for-profit lenders to "extend credit to a class of persons who...probably would not receive such credit or would receive it on less favorable terms than are ordinarily available to other applicants." According to the CFPB, "By permitting the consideration of a prohibited basis such as race, national origin, or sex in connection with a special purpose credit program, Congress protected a broad array of programs 'specifically designed to prefer members of economically disadvantaged classes' and 'to increase access to the credit market by persons previously foreclosed from it." SPCPs that have long been in use for small business loans are increasingly being designed for mortgages.

Importantly, a for-profit lender who wants to offer an SPCP must first prepare a written plan that includes an analysis supporting the need for the program. By definition, then, SPCPs are responsive to community needs and can enable lenders to better fulfill the CRA's purposes and intent. For this reason, we recommend that any lender who offers an SPCP and can demonstrate that it is extending credit under the program should be recognized as offering a responsive credit product or program under the retail services test. We therefore suggest that SPCPs be specifically referenced in section __.23(c)(1)(iii) as follows: "Are conducted in cooperation with MDIs, WDIs, LCUs, or Treasury Department-certified CDFIs, or pursuant to a Special Purpose Credit Program, in a safe and sound manner." Given the qualitative nature of the test, and the fact that SPCPs require the preparation of a written plan, examiners could ask institutions to report lending activity under the SPCP and could review the SPCP written plans as part of the evaluation process.

Without greater weighting of the retail services test, the net impact on the overall CRA rating will be small. We also recognize that any loan made under an SPCP to an LMI household or in an LMI area will be counted in the retail lending test. But the "extra credit" attributable to the existence of the SPCP and lending under it in the retail services test evaluation would encourage lenders to offer and lend under SPCPs, which can increase the effectiveness and responsiveness of their CRA activities.

Public Data to Be Released: More Data and More Clarity Are Needed

Public data related to the CRA come from individual bank and aggregated data released annually by the agencies and published on the website of the Federal Financial Institutions Examination Council (FFIEC), data in CRA public evaluations that are released intermittently as examinations are published, data (beyond CRA public evaluations) in individual bank public files, and data from the ACS, HMDA, and 1071 regulations used as benchmarks in examinations. As researchers, we are especially interested in the individual bank and aggregated data released by the regulators, which we will refer to as FFIEC data.

We have analyzed the extent to which the CRA encourages mortgage, small business, small farm, and community development lending (Goodman, Zhu, and Walsh 2019). With respect to mortgages, HMDA data are rich in both detail and completeness. We urge the regulators to work with the CFPB to release additional information collected pursuant to HMDA, such as the precise number of units financed by a multifamily loan, as we have previously recommended. FFIEC data on small business and small farm lending, as they are currently released, are barely adequate. We understand that publicly available small business lending data will improve significantly with the CFPB's implementation of the 1071 regulations and agree that updating and expanding the FFIEC's small business data should defer to that change. We note that the section 1071 regulations will not apply to small farm data and urge the regulators to consider further improvements in that category.

But the public FFIEC data about community development financing are both incomplete and too highly aggregated. The FFIEC public data provide only the number and amount of community development lending nationwide for each bank. Moreover, the public FFIEC data cover only community development loans, and there is no information about community development investments. As a result, we have no information about individual bank community development financing at the local

level. To remedy the first problem, we propose that community development financing totals be disclosed, for each bank, at the assessment area, state, and institution levels.

The NPR proposes in section __.42(h) to remedy the problem related to community development investments by including investment data in addition to the loan data, as well as to provide data aggregated to the county level, both of which are improvements. Section __.42 of the proposal would require banks to collect (section __.42(a)(5)) and report to the regulators annually (section __.42(b)(3)) a significant amount of information about community development loans and investments. Much of the information about community development loans and investments is nonproprietary, virtually by the nature of the transaction. Moreover, many counties, such as Los Angeles and Cook Counties, are large and dense with community development financing; reporting at the county level does not tell us much about how the community development financing is directed. We urge the regulators to consider more granular public reporting of this information (by census tract, zip code, or Public Use Microdata Area, as used by the census), especially as the proposed regulation increases the weight of community development financing in CRA ratings.

Data on deposits currently exist only at the branch office level and relate to where the deposit was booked. For large banks, and those with extensive nonbranch networks, the branch office data often differ from data related to the depositor's address. The NPR (sections __.42(a)(7) and __.42(b)(5)) proposes to change this for banks with average assets of more than \$10 billion in both of the prior two calendar years. The proposal would require collection of the dollar amount of deposits at the county level, based on "the address associated with the individual account" and reporting at the county, state, and multistate MSA and for the institution overall, "the average annual deposit balances" associated with the addresses in these geographies. The data will be used extensively to weight bank performance across geographies and in the retail services test. But section __.(b)(5) states, "[the] [Agency] will not make deposits data reported under this paragraph publicly available in the form of a dataset for all reporting banks." We see no reason why these data, disaggregated at no smaller than a county level, should not be made public, enabling the public to better understand not only what communities are being served by bank deposit services but the relationship between bank deposits and bank lending.

An important aspect of the proposed regulation is the use of local and national benchmarks, under both the retail lending and community development financing tests, against which bank performance will be evaluated. At several places in the NPR (e.g., 33939 and 33973), the agencies state that these benchmarks will be available to the public and suggest that not only the benchmarks but bank performance against the benchmarks will be made public, potentially in an online dashboard. This information, as the NPR recognizes, can be valuable in enabling the public (as well as banks and

regulators) to understand actual bank performance and the potential to improve and to do so in a way that does not rely on when a CRA examination is performed and the public evaluation released. We urge the regulators to be specific about what will be released, how, and when and to release bank performance data at least annually.

Question 173 of the NPR asks whether the agencies should, as they propose, include HMDA data on the race and ethnicity of a bank's mortgage lending (both individually and in comparison with peers) in CRA public evaluations. We support this proposal. We suggest, however, that the agencies make clear that, similarly, once such data become available with respect to small business lending pursuant to the section 1071 regulations, they will similarly be included in public evaluations. Small business lending lags both minority populations and minority businesses; as with mortgage lending, including the information about a bank's performance in this area in the public evaluation can highlight both successes and areas for improvement (Theodos 2021).

Conclusion

Updating the CRA regulations has been a work in progress since at least 2001. We are pleased that the three regulators have jointly put forward a comprehensive, forward-looking proposal. We have made some suggestions for improvement, and we know others will as well. We urge the regulators to build on the substantial work they have already done; we look forward to seeing the final rule.

<mark>26</mark> CRA MODERNIZATION

Appendix

TABLE A.1
Closed-End Mortgage Lending Test Results for All MSAs

	Geog	raphic Dis	tribution N	∕letric	Bor	rower Dist	ribution M	letric
		ncome orhoods	Moderate-income neighborhoods		Low-income borrowers		Moderate-income borrowers	
	MSA		MSA		MSA		MSA	
	count	Share	count	Share	count	Share	count	Share
Market binding	163		124		354		45	
Needs to improve	33	11.0%	8	2.2%	126	35.6%	15	3.7%
Low satisfactory	78	26.1%	103	28.9%	222	62.7%	26	7.9%
High satisfactory	30	10.0%	12	3.4%	4	1.1%	3	1.1%
Outstanding	22	7.4%	1	0.3%	2	0.6%	1	0.3%
Community binding	136		233		0		312	
Needs to improve	1	0.3%	0	0.0%	0	0.0%	1	0.0%
Low satisfactory	38	12.7%	130	36.4%	0	0.0%	41	20.1%
High satisfactory	26	8.7%	60	16.8%	0	0.0%	26	15.8%
Outstanding	71	23.7%	43	12.0%	0	0.0%	244	51.1%
Total	299	100.0%	357	100.0%	354	100.0%	354	100.0%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

Notes: MSA = metropolitan statistical area. The data refer to closed-end loans for one-to-four-unit single-family homes.

TABLE A.2
Closed-End Mortgage Lending Test for Low-Income Neighborhoods in the 60 Largest MSAs

						High-		
	Community	Market	Bank			income	Bank /	Bank /
	benchmark	benchmark	lending	Final rating	Binding	borrowers	community	market
New York-Newark-Jersey City, NY-NJ	2.9%	3.4%	2.6%	High satisfactory	Community	38.0%	91.5%	76.9%
Los Angeles-Long Beach-Anaheim, CA	2.7%	3.0%	2.9%	Outstanding	Community	56.5%	104.9%	94.8%
Chicago-Naperville-Elgin, IL-IN-WI	4.3%	2.9%	2.7%	Low satisfactory	Market	23.8%	63.7%	94.4%
Dallas-Fort Worth-Arlington, TX	4.5%	2.8%	2.8%	Low satisfactory	Market	29.7%	62.6%	101.4%
Houston-The Woodlands-Sugar Land, TX	4.9%	2.7%	2.7%	Low satisfactory	Market	36.9%	56.3%	103.2%
Philadelphia-Camden-Wilmington, PA	3.6%	2.1%	2.2%	Low satisfactory	Market	22.5%	60.7%	101.8%
Atlanta-Sandy Springs-Roswell, GA	2.9%	2.7%	2.7%	High satisfactory	Community	32.2%	92.5%	99.4%
Washington-Arlington-Alexandria, DC-VA	3.7%	4.0%	3.9%	Outstanding	Community	22.0%	106.1%	98.6%
Miami-Fort Lauderdale-West Palm Beach, FL	2.6%	2.4%	2.3%	Low satisfactory	Community	42.0%	85.6%	92.5%
Boston-Cambridge-Newton, MA-NH	3.4%	4.2%	3.8%	Outstanding	Community	22.6%	109.8%	89.6%
Detroit-Warren-Dearborn, MI	4.8%	2.3%	2.6%	High satisfactory	Market	18.7%	55.1%	116.5%
San Francisco-Oakland-Hayward, CA	4.9%	5.6%	4.0%	Low satisfactory	Community	37.9%	83.2%	71.8%
Phoenix-Mesa-Scottsdale, AZ	3.9%	3.1%	2.5%	Needs to Improve	Market	18.9%	63.2%	78.8%
Seattle-Tacoma-Bellevue, WA	2.6%	2.6%	2.0%	Low Satisfactory	Community	21.3%	76.2%	74.1%
Minneapolis-St. Paul-Bloomington, MN-WI	2.0%	2.3%	2.1%	Outstanding	Community	16.0%	103.8%	93.3%
Riverside-San Bernardino-Ontario, CA	2.7%	2.0%	1.5%	Needs to Improve	Market	23.4%	54.1%	74.0%
Tampa-St. Petersburg-Clearwater, FL	1.8%	1.6%	1.5%	Low satisfactory	Community	31.6%	81.9%	90.2%
San Diego-Carlsbad, CA	2.9%	2.9%	2.4%	Low satisfactory	Community	39.8%	84.0%	82.9%
Baltimore-Columbia-Towson, MD	4.0%	2.5%	2.3%	Low satisfactory	Market	16.7%	57.1%	92.6%
Denver-Aurora-Lakewood, CO	4.8%	4.8%	4.1%	Low satisfactory	Community	23.3%	86.4%	85.5%
St. Louis, MO-IL	4.9%	1.7%	1.7%	Low satisfactory	Market	23.2%	35.7%	103.7%
Charlotte-Concord-Gastonia, NC-SC	2.6%	2.5%	2.0%	Low satisfactory	Community	33.9%	77.3%	82.7%
Pittsburgh, PA	2.7%	1.4%	1.4%	Low satisfactory	Market	22.5%	53.2%	100.3%
Cincinnati, OH-KY-IN	3.2%	2.7%	2.7%	Low satisfactory	Community	25.9%	82.7%	100.9%
Portland-Vancouver-Hillsboro, OR-WA	1.0%	0.9%	0.9%	Low satisfactory	Community	30.9%	87.2%	93.1%
Orlando-Kissimmee-Sanford, FL	0.8%	0.9%	0.7%	Low satisfactory	Community	28.7%	86.0%	73.1%
Columbus, OH	4.7%	4.0%	3.7%	Low satisfactory	Community	22.6%	78.2%	91.2%
Cleveland-Elyria, OH	6.0%	2.9%	3.0%	Low satisfactory	Market	28.8%	50.5%	106.3%
Kansas City, MO-KS	5.2%	2.6%	2.7%	Low satisfactory	Market	20.9%	51.2%	103.5%
San Antonio-New Braunfels, TX	3.5%	1.3%	1.4%	Low satisfactory	Market	30.1%	40.0%	109.0%
Sacramento-Roseville-Arden-Arcade, CA	4.7%	5.9%	4.8%	Outstanding	Community	27.0%	103.3%	82.3%
Austin-Round Rock, TX	3.9%	3.6%	3.8%	High satisfactory	Community	50.2%	98.0%	104.6%
Las Vegas-Henderson-Paradise, NV	1.6%	1.4%	1.5%	High satisfactory	Community	22.5%	92.3%	104.8%

	_					High-		
	Community	Market	Bank			income	Bank /	Bank /
	benchmark	benchmark	lending	Final rating	Binding	borrowers	community	market
Indianapolis-Carmel-Anderson, IN	5.8%	3.8%	4.3%	High satisfactory	Market	26.6%	74.1%	113.4%
Virginia Beach-Norfolk-Newport News, VA	2.2%	2.3%	1.8%	Low satisfactory	Community	23.8%	78.1%	76.8%
Nashville-Davidson-Murfreesboro-Franklin, TN	3.0%	3.7%	3.7%	Outstanding	Community	46.0%	122.3%	99.6%
San Jose-Sunnyvale-Santa Clara, CA	4.3%	4.5%	3.1%	Low satisfactory	Community	43.4%	71.4%	68.2%
Milwaukee-Waukesha-West Allis, WI	6.8%	3.6%	3.3%	Low satisfactory	Market	19.5%	48.6%	92.8%
Jacksonville, FL	2.8%	1.2%	1.3%	Low satisfactory	Market	24.3%	44.7%	103.7%
Providence-Warwick, RI-MA	4.8%	5.9%	4.7%	High satisfactory	Community	16.0%	96.3%	79.2%
Richmond, VA	3.8%	3.4%	3.5%	High satisfactory	Community	20.7%	92.4%	103.9%
Oklahoma City, OK	3.2%	1.5%	1.6%	Low satisfactory	Market	24.8%	50.8%	107.5%
Birmingham-Hoover, AL	4.2%	1.3%	1.6%	Outstanding	Market	29.5%	39.4%	126.2%
Louisville/Jefferson County, KY-IN	3.7%	2.7%	2.8%	Low satisfactory	Market	21.4%	75.7%	102.5%
New Orleans-Metairie, LA	6.2%	6.0%	6.5%	Outstanding	Community	47.5%	105.6%	108.6%
Buffalo-Cheektowaga-Niagara Falls, NY	6.4%	4.1%	5.0%	High satisfactory	Market	17.4%	78.6%	120.9%
Hartford-West Hartford-East Hartford, CT	3.7%	3.9%	2.8%	Low satisfactory	Community	9.4%	74.9%	71.5%
Raleigh, NC	2.3%	2.2%	2.3%	High satisfactory	Community	31.8%	98.1%	104.1%
Memphis, TN-MS-AR	9.3%	3.4%	3.6%	Low satisfactory	Market	41.7%	39.0%	104.8%
Rochester, NY	2.9%	2.3%	3.0%	Outstanding	Community	21.4%	102.7%	128.3%
Knoxville, TN	1.8%	1.6%	1.7%	High satisfactory	Community	33.8%	93.6%	104.5%
Tucson, AZ	4.5%	3.3%	2.5%	Needs to improve	Market	21.1%	56.9%	77.1%
Albany-Schenectady-Troy, NY	2.5%	2.3%	2.4%	High satisfactory	Community	20.1%	94.4%	100.7%
Albuquerque, NM	2.6%	1.7%	1.8%	Low satisfactory	Market	28.3%	69.5%	108.3%
Greenville-Anderson-Mauldin, SC	2.8%	2.2%	2.5%	High satisfactory	Market	36.7%	88.5%	112.7%
Salt Lake City, UT	1.9%	1.9%	1.8%	High satisfactory	Community	20.2%	95.9%	94.7%
Little Rock-North Little Rock-Conway, AR	2.3%	1.0%	1.2%	High satisfactory	Market	36.6%	51.3%	113.5%
Omaha-Council Bluffs, NE-IA	4.1%	2.5%	2.4%	Low satisfactory	Market	15.6%	58.7%	98.7%
Grand Rapids-Wyoming, MI	1.8%	2.1%	2.0%	Outstanding	Community	25.3%	113.4%	93.7%
Bridgeport-Stamford-Norwalk, CT	5.1%	4.7%	2.6%	Needs to improve	Market	11.0%	51.9%	55.7%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

Notes: MSA = metropolitan statistical area. MSAs are listed from most households to least households. The data refer to closed-end loans for one-to-four-unit single-family homes.

TABLE A.3

Closed-End Mortgage Lending Test for Moderate-Income Neighborhoods in the 60 Largest MSAs

	Community benchmark	Market benchmark	Bank lending	Final rating	Binding	High- income borrowers	Bank /	Bank / market
New York-Newark-Jersey City, NY-NJ	13.4%	13.6%	11.3%	Low satisfactory	Community	37.6%	84.4%	83.3%
Los Angeles-Long Beach-Anaheim, CA	17.7%	17.2%	11.9%	Low satisfactory	Community	50.4%	66.9%	68.8%
Chicago-Naperville-Elgin, IL-IN-WI	17.5%	13.8%	12.6%	Low satisfactory	Market	22.3%	72.4%	91.6%
Dallas-Fort Worth-Arlington, TX	17.8%	12.4%	12.3%	Low satisfactory	Market	27.8%	69.0%	99.3%
Houston-The Woodlands-Sugar Land, TX	19.7%	12.9%	11.3%	Low satisfactory	Market	30.4%	57.5%	88.1%
Philadelphia-Camden-Wilmington, PA	17.6%	16.6%	16.5%	High satisfactory	Community	21.7%	93.6%	99.5%
Atlanta-Sandy Springs-Roswell, GA	18.7%	18.0%	16.3%	Low satisfactory	Community	24.2%	87.3%	90.7%
Washington-Arlington-Alexandria, DC-VA	16.6%	16.4%	14.7%	Low satisfactory	Community	17.8%	88.1%	89.5%
Miami-Fort Lauderdale-West Palm Beach, FL	22.6%	20.1%	15.2%	Low satisfactory	Community	38.0%	67.2%	75.4%
Boston-Cambridge-Newton, MA-NH	13.5%	14.8%	13.1%	High satisfactory	Community	27.7%	97.1%	88.4%
Detroit-Warren-Dearborn, MI	18.9%	14.6%	14.1%	Low satisfactory	Market	17.2%	74.3%	96.4%
San Francisco-Oakland-Hayward, CA	16.5%	17.0%	12.0%	Low satisfactory	Community	41.4%	72.6%	70.5%
Phoenix-Mesa-Scottsdale, AZ	19.3%	15.5%	13.5%	Low satisfactory	Market	23.5%	69.7%	86.9%
Seattle-Tacoma-Bellevue, WA	17.6%	18.6%	14.8%	Low satisfactory	Community	27.0%	83.9%	79.6%
Minneapolis-St. Paul-Bloomington, MN-WI	14.1%	14.7%	13.5%	High satisfactory	Community	17.1%	95.3%	91.8%
Riverside-San Bernardino-Ontario, CA	21.4%	18.8%	16.0%	Low satisfactory	Community	36.9%	74.8%	85.0%
Tampa-St. Petersburg-Clearwater, FL	21.2%	17.9%	15.6%	Low satisfactory	Community	26.7%	73.8%	87.4%
San Diego-Carlsbad, CA	15.1%	15.2%	10.9%	Low satisfactory	Community	42.6%	71.9%	71.6%
Baltimore-Columbia-Towson, MD	17.0%	14.2%	12.9%	Low satisfactory	Community	18.3%	75.6%	90.5%
Denver-Aurora-Lakewood, CO	20.0%	20.4%	16.9%	Low satisfactory	Community	20.6%	84.7%	82.7%
St. Louis, MO-IL	16.5%	13.0%	12.4%	Low satisfactory	Market	20.8%	75.3%	96.0%
Charlotte-Concord-Gastonia, NC-SC	20.5%	17.7%	15.2%	Low satisfactory	Community	27.6%	74.2%	86.1%
Pittsburgh, PA	16.5%	13.1%	13.2%	Low satisfactory	Market	23.2%	79.7%	100.5%
Cincinnati, OH-KY-IN	16.9%	14.7%	13.6%	Low satisfactory	Community	22.1%	80.5%	92.8%
Portland-Vancouver-Hillsboro, OR-WA	19.2%	19.4%	17.1%	Low satisfactory	Community	27.8%	89.2%	88.1%
Orlando-Kissimmee-Sanford, FL	19.5%	16.8%	14.3%	Low satisfactory	Community	29.2%	73.6%	85.2%
Columbus, OH	17.9%	16.2%	14.3%	Low satisfactory	Community	19.1%	79.8%	88.2%
Cleveland-Elyria, OH	15.2%	12.3%	11.6%	Low satisfactory	Market	20.5%	76.3%	94.1%
Kansas City, MO-KS	17.6%	15.5%	14.3%	Low satisfactory	Community	18.6%	81.2%	92.1%
San Antonio-New Braunfels, TX	21.7%	13.2%	11.5%	Low satisfactory	Market	28.3%	53.0%	86.9%
Sacramento-Roseville-Arden-Arcade, CA	17.5%	18.2%	14.7%	Low satisfactory	Community	28.4%	83.6%	80.4%
Austin-Round Rock, TX	17.6%	15.3%	12.5%	Low satisfactory	Community	30.0%	71.0%	81.4%
Las Vegas-Henderson-Paradise, NV	15.7%	13.7%	12.0%	Low satisfactory	Community	20.3%	76.0%	87.6%
Indianapolis-Carmel-Anderson, IN	15.4%	12.6%	13.0%	Low satisfactory	Community	18.5%	84.3%	102.8%

						High-		
	Community	Market	Bank			income	Bank /	Bank /
	benchmark	benchmark	lending	Final rating	Binding	borrowers	community	market
Virginia Beach-Norfolk-Newport News, VA	16.1%	16.2%	12.5%	Low satisfactory	Community	19.6%	77.8%	77.3%
Nashville-Davidson-Murfreesboro-Franklin, TN	16.4%	15.6%	14.7%	Low satisfactory	Community	30.6%	90.0%	94.2%
San Jose-Sunnyvale-Santa Clara, CA	16.3%	17.5%	11.9%	Low satisfactory	Community	47.1%	73.4%	68.1%
Milwaukee-Waukesha-West Allis, WI	11.6%	10.3%	8.2%	Low satisfactory	Community	16.0%	70.7%	79.9%
Jacksonville, FL	18.5%	14.7%	13.1%	Low satisfactory	Market	24.9%	70.9%	89.2%
Providence-Warwick, RI-MA	13.1%	13.8%	11.2%	Low satisfactory	Community	18.5%	85.9%	81.5%
Richmond, VA	18.2%	17.4%	15.7%	Low satisfactory	Community	18.5%	86.0%	90.3%
Oklahoma City, OK	16.7%	12.1%	12.1%	Low satisfactory	Market	24.8%	72.6%	100.5%
Birmingham-Hoover, AL	19.7%	13.0%	13.3%	Low satisfactory	Market	27.6%	67.7%	102.2%
Louisville/Jefferson County, KY-IN	13.7%	12.1%	12.0%	Low satisfactory	Community	17.2%	87.3%	99.3%
New Orleans-Metairie, LA	19.6%	16.3%	15.9%	Low satisfactory	Community	37.3%	81.4%	97.5%
Buffalo-Cheektowaga-Niagara Falls, NY	10.2%	8.9%	9.4%	High satisfactory	Community	16.8%	92.2%	106.6%
Hartford-West Hartford-East Hartford, CT	10.5%	10.1%	7.9%	Low satisfactory	Community	10.6%	75.8%	78.1%
Raleigh, NC	24.7%	22.2%	20.4%	Low satisfactory	Community	23.4%	82.6%	91.6%
Memphis, TN-MS-AR	13.2%	8.3%	8.1%	Low satisfactory	Market	39.4%	61.8%	98.1%
Rochester, NY	10.6%	10.5%	12.0%	Outstanding	Community	17.2%	113.3%	114.3%
Knoxville, TN	18.5%	16.3%	17.5%	High satisfactory	Community	32.0%	94.5%	107.5%
Tucson, AZ	21.0%	15.4%	12.3%	Needs to improve	Market	25.0%	58.5%	79.8%
Albany-Schenectady-Troy, NY	12.8%	12.8%	11.4%	Low satisfactory	Community	18.4%	88.6%	89.0%
Albuquerque, NM	27.0%	21.9%	20.8%	Low satisfactory	Market	24.3%	77.0%	95.1%
Greenville-Anderson-Mauldin, SC	18.1%	13.8%	11.6%	Low satisfactory	Market	24.1%	63.9%	84.1%
Salt Lake City, UT	16.7%	16.3%	13.8%	Low satisfactory	Community	19.6%	82.6%	84.4%
Little Rock-North Little Rock-Conway, AR	13.4%	9.1%	9.0%	Low satisfactory	Market	31.1%	67.5%	98.8%
Omaha-Council Bluffs, NE-IA	17.9%	15.7%	14.8%	Low satisfactory	Community	16.0%	82.8%	94.7%
Grand Rapids-Wyoming, MI	12.1%	13.0%	10.9%	High satisfactory	Community	19.2%	90.3%	83.7%
Bridgeport-Stamford-Norwalk, CT	15.4%	14.7%	10.4%	Low satisfactory	Community	19.3%	67.3%	70.5%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

Notes: MSA = metropolitan statistical area. MSAs are listed from most households to least households. The data refer to closed-end loans for one-to-four-unit single-family homes.

TABLE A.4
Closed-End Mortgage Lending Test for Low-Income Borrowers in the 60 Largest MSAs

	Community	Market	Bank			High- income	Bank /	Bank /
	benchmark	benchmark	lending	Final rating	Binding	borrowers	community	market
New York-Newark-Jersey City, NY-NJ	22.5%	5.4%	3.3%	Needs to improve	Market	14.6%	61.2%	22.5%
Los Angeles-Long Beach-Anaheim, CA	24.1%	3.7%	1.7%	Needs to improve	Market	7.1%	47.0%	24.1%
Chicago-Naperville-Elgin, IL-IN-WI	35.6%	9.0%	8.1%	Low satisfactory	Market	22.7%	90.3%	35.6%
Dallas-Fort Worth-Arlington, TX	24.3%	5.9%	6.3%	Low satisfactory	Market	25.8%	106.6%	24.3%
Houston-The Woodlands-Sugar Land, TX	28.1%	4.9%	4.4%	Low satisfactory	Market	15.6%	88.8%	28.1%
Philadelphia-Camden-Wilmington, PA	24.1%	11.2%	11.0%	Low satisfactory	Market	45.7%	98.6%	24.1%
Atlanta-Sandy Springs-Roswell, GA	16.7%	9.4%	6.8%	Needs to improve	Market	40.8%	72.3%	16.7%
Washington-Arlington-Alexandria, DC-VA	27.3%	11.2%	9.2%	Low satisfactory	Market	33.8%	82.4%	27.3%
Miami-Fort Lauderdale-West Palm Beach, FL	29.5%	4.7%	2.9%	Needs to improve	Market	9.8%	61.8%	29.5%
Boston-Cambridge-Newton, MA-NH	31.5%	6.7%	5.6%	Low satisfactory	Market	17.8%	83.7%	31.5%
Detroit-Warren-Dearborn, MI	35.5%	11.4%	10.4%	Low satisfactory	Market	29.2%	90.6%	35.5%
San Francisco-Oakland-Hayward, CA	25.9%	3.8%	2.2%	Needs to improve	Market	8.6%	59.4%	25.9%
Phoenix-Mesa-Scottsdale, AZ	24.4%	7.8%	6.2%	Needs to improve	Market	25.4%	79.9%	24.4%
Seattle-Tacoma-Bellevue, WA	20.2%	5.5%	4.2%	Needs to improve	Market	20.9%	76.4%	20.2%
Minneapolis-St. Paul-Bloomington, MN-WI	26.5%	10.9%	9.9%	Low satisfactory	Market	37.2%	90.6%	26.5%
Riverside-San Bernardino-Ontario, CA	23.2%	5.5%	3.1%	Needs to improve	Market	13.4%	56.9%	23.2%
Tampa-St. Petersburg-Clearwater, FL	28.1%	6.9%	5.1%	Needs to improve	Market	18.2%	74.0%	28.1%
San Diego-Carlsbad, CA	24.7%	4.4%	2.1%	Needs to improve	Market	8.7%	48.5%	24.7%
Baltimore-Columbia-Towson, MD	31.3%	12.4%	10.7%	Low satisfactory	Market	34.2%	86.6%	31.3%
Denver-Aurora-Lakewood, CO	26.4%	9.1%	6.4%	Needs to improve	Market	24.4%	70.6%	26.4%
St. Louis, MO-IL	29.8%	11.9%	10.6%	Low satisfactory	Market	35.4%	88.6%	29.8%
Charlotte-Concord-Gastonia, NC-SC	25.6%	7.9%	6.9%	Low satisfactory	Market	26.8%	86.7%	25.6%
Pittsburgh, PA	31.8%	10.8%	9.9%	Low satisfactory	Market	31.2%	91.3%	31.8%
Cincinnati, OH-KY-IN	30.5%	11.3%	9.7%	Low satisfactory	Market	31.9%	85.7%	30.5%
Portland-Vancouver-Hillsboro, OR-WA	26.7%	5.4%	4.4%	Low satisfactory	Market	16.3%	80.8%	26.7%
Orlando-Kissimmee-Sanford, FL	24.1%	5.5%	3.7%	Needs to improve	Market	15.5%	68.3%	24.1%
Columbus, OH	29.2%	9.8%	7.9%	Low satisfactory	Market	27.0%	80.6%	29.2%
Cleveland-Elyria, OH	32.9%	10.4%	9.1%	Low satisfactory	Market	27.5%	86.9%	32.9%
Kansas City, MO-KS	24.7%	11.2%	9.0%	Low satisfactory	Market	36.4%	80.3%	24.7%
San Antonio-New Braunfels, TX	28.4%	5.7%	4.4%	Needs to improve	Market	15.5%	76.8%	28.4%
Sacramento-Roseville-Arden-Arcade, CA	27.0%	5.5%	4.3%	Needs to improve	Market	15.8%	77.9%	27.0%
Austin-Round Rock, TX	28.7%	5.7%	4.9%	Low satisfactory	Market	16.9%	85.0%	28.7%
Las Vegas-Henderson-Paradise, NV	25.8%	6.8%	5.0%	Needs to improve	Market	19.5%	73.3%	25.8%
Indianapolis-Carmel-Anderson, IN	30.4%	12.7%	11.9%	Low satisfactory	Market	39.2%	94.4%	30.4%

						High-		
	Community	Market	Bank			income	Bank /	Bank /
	benchmark	benchmark	lending	Final rating	Binding	borrowers	community	market
Virginia Beach-Norfolk-Newport News, VA	19.1%	8.0%	6.0%	Needs to improve	Market	31.4%	74.7%	19.1%
Nashville-Davidson-Murfreesboro-Franklin, TN	22.5%	7.2%	5.3%	Needs to improve	Market	23.7%	74.0%	22.5%
San Jose-Sunnyvale-Santa Clara, CA	25.0%	2.9%	1.4%	Needs to improve	Market	5.6%	49.1%	25.0%
Milwaukee-Waukesha-West Allis, WI	31.5%	9.3%	8.4%	Low satisfactory	Market	26.6%	90.5%	31.5%
Jacksonville, FL	27.6%	8.2%	6.1%	Needs to improve	Market	21.9%	73.8%	27.6%
Providence-Warwick, RI-MA	31.3%	7.5%	5.7%	Needs to improve	Market	18.2%	75.7%	31.3%
Richmond, VA	29.1%	12.2%	10.2%	Low satisfactory	Market	35.2%	84.1%	29.1%
Oklahoma City, OK	30.3%	10.8%	12.4%	High satisfactory	Market	41.0%	115.2%	30.3%
Birmingham-Hoover, AL	23.9%	8.7%	7.9%	Low satisfactory	Market	33.0%	91.0%	23.9%
Louisville/Jefferson County, KY-IN	36.0%	12.4%	12.3%	Low satisfactory	Market	34.2%	99.2%	36.0%
New Orleans-Metairie, LA	32.4%	6.6%	5.1%	Needs to improve	Market	15.7%	77.4%	32.4%
Buffalo-Cheektowaga-Niagara Falls, NY	33.6%	11.0%	11.9%	Low satisfactory	Market	35.5%	108.4%	33.6%
Hartford-West Hartford-East Hartford, CT	32.9%	13.5%	11.2%	Low satisfactory	Market	34.1%	83.3%	32.9%
Raleigh, NC	29.3%	9.9%	8.4%	Low satisfactory	Market	28.5%	84.9%	29.3%
Memphis, TN-MS-AR	31.1%	5.9%	4.9%	Low satisfactory	Market	15.8%	83.6%	31.1%
Rochester, NY	30.7%	10.8%	11.4%	Low satisfactory	Market	37.2%	106.1%	30.7%
Knoxville, TN	31.0%	9.3%	8.5%	Low satisfactory	Market	27.5%	91.4%	31.0%
Tucson, AZ	27.7%	8.4%	5.5%	Needs to improve	Market	19.7%	65.0%	27.7%
Albany-Schenectady-Troy, NY	31.8%	9.8%	8.8%	Low satisfactory	Market	27.8%	90.4%	31.8%
Albuquerque, NM	29.8%	9.0%	7.9%	Low satisfactory	Market	26.7%	87.9%	29.8%
Greenville-Anderson-Mauldin, SC	28.4%	8.4%	5.8%	Needs to improve	Market	20.4%	69.1%	28.4%
Salt Lake City, UT	22.4%	6.7%	5.2%	Needs to improve	Market	23.4%	77.8%	22.4%
Little Rock-North Little Rock-Conway, AR	33.9%	8.0%	7.2%	Low satisfactory	Market	21.2%	90.2%	33.9%
Omaha-Council Bluffs, NE-IA	30.1%	12.0%	11.0%	Low satisfactory	Market	36.5%	91.5%	30.1%
Grand Rapids-Wyoming, MI	23.2%	9.7%	8.9%	Low satisfactory	Market	38.1%	91.4%	23.2%
Bridgeport-Stamford-Norwalk, CT	31.5%	9.5%	6.3%	Needs to improve	Market	19.9%	65.8%	31.5%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

Notes: MSA = metropolitan statistical area. MSAs are listed from most households to least households. The data refer to closed-end loans for one-to-four-unit single-family homes.

TABLE A.5

Closed-End Mortgage Lending Test for Moderate-Income Borrowers in the 60 Largest MSAs

			ъ.			.High-	D 1 /	D 1 /
	Community	Market	Bank	- • • ••	D: !!	income	Bank /	Bank /
	benchmark	benchmark	lending	Final rating	Binding	borrowers	community	market
New York-Newark-Jersey City, NY-NJ	14.2%	14.8%	11.5%	Low satisfactory	Community	80.6%	77.4%	14.2%
Los Angeles-Long Beach-Anaheim, CA	14.4%	7.2%	5.6%	Needs to improve	Market	39.0%	77.9%	14.4%
Chicago-Naperville-Elgin, IL-IN-WI	18.5%	21.4%	19.1%	Outstanding	Community	103.3%	89.6%	18.5%
Dallas-Fort Worth-Arlington, TX	18.2%	16.6%	14.5%	Low satisfactory	Community	79.4%	87.0%	18.2%
Houston-The Woodlands-Sugar Land, TX	18.0%	17.2%	13.9%	Low satisfactory	Community	77.1%	80.7%	18.0%
Philadelphia-Camden-Wilmington, PA	13.9%	23.1%	21.9%	Outstanding	Community	157.3%	94.5%	13.9%
Atlanta-Sandy Springs-Roswell, GA	11.9%	22.2%	18.3%	Outstanding	Community	154.3%	82.5%	11.9%
Washington-Arlington-Alexandria, DC-VA	19.7%	23.2%	20.7%	Outstanding	Community	105.2%	89.5%	19.7%
Miami-Fort Lauderdale-West Palm Beach, FL	17.3%	12.3%	9.7%	Needs to improve	Market	56.0%	78.6%	17.3%
Boston-Cambridge-Newton, MA-NH	17.8%	21.1%	17.2%	High satisfactory	Community	96.4%	81.5%	17.8%
Detroit-Warren-Dearborn, MI	20.0%	22.7%	20.2%	Outstanding	Community	100.9%	89.0%	20.0%
San Francisco-Oakland-Hayward, CA	14.5%	11.3%	6.9%	Needs to improve	Market	47.3%	60.7%	14.5%
Phoenix-Mesa-Scottsdale, AZ	18.7%	20.3%	16.9%	High satisfactory	Community	90.0%	82.9%	18.7%
Seattle-Tacoma-Bellevue, WA	14.0%	18.0%	13.9%	High satisfactory	Community	99.5%	77.4%	14.0%
Minneapolis-St. Paul-Bloomington, MN-WI	18.0%	26.9%	24.7%	Outstanding	Community	136.9%	91.8%	18.0%
Riverside-San Bernardino-Ontario, CA	16.4%	11.0%	10.9%	Low satisfactory	Market	66.9%	99.0%	16.4%
Tampa-St. Petersburg-Clearwater, FL	18.7%	19.9%	15.9%	Low satisfactory	Community	85.4%	80.1%	18.7%
San Diego-Carlsbad, CA	16.0%	8.9%	7.4%	Low satisfactory	Market	46.0%	82.6%	16.0%
Baltimore-Columbia-Towson, MD	18.4%	24.3%	22.3%	Outstanding	Community	120.9%	91.5%	18.4%
Denver-Aurora-Lakewood, CO	19.5%	23.1%	18.3%	High satisfactory	Community	94.1%	79.3%	19.5%
St. Louis, MO-IL	18.3%	22.4%	19.3%	Outstanding	Community	105.5%	86.4%	18.3%
Charlotte-Concord-Gastonia, NC-SC	17.8%	20.2%	16.8%	High satisfactory	Community	94.2%	83.0%	17.8%
Pittsburgh, PA	18.4%	22.8%	20.8%	Outstanding	Community	112.9%	91.1%	18.4%
Cincinnati, OH-KY-IN	19.6%	23.6%	20.9%	Outstanding	Community	107.0%	88.7%	19.6%
Portland-Vancouver-Hillsboro, OR-WA	18.8%	19.8%	17.3%	High satisfactory	Community	92.3%	87.7%	18.8%
Orlando-Kissimmee-Sanford, FL	19.2%	17.1%	14.2%	Low satisfactory	Community	73.6%	82.9%	19.2%
Columbus, OH	19.1%	22.9%	19.1%	Outstanding	Community	100.1%	83.5%	19.1%
Cleveland-Elyria, OH	19.0%	23.5%	20.4%	Outstanding	Community	107.3%	87.1%	19.0%
Kansas City, MO-KS	17.5%	23.5%	21.1%	Outstanding	Community	120.6%	89.7%	17.5%
San Antonio-New Braunfels, TX	18.1%	16.8%	13.5%	Low satisfactory	Community	74.4%	80.0%	18.1%
Sacramento-Roseville-Arden-Arcade, CA	16.5%	16.4%	14.5%	Low satisfactory	Community	87.8%	88.3%	16.5%
Austin-Round Rock, TX	19.7%	19.1%	13.7%	Low satisfactory	Community	69.8%	71.8%	19.7%
Las Vegas-Henderson-Paradise, NV	18.3%	19.0%	16.9%	High satisfactory	Community	92.3%	89.3%	18.3%
Indianapolis-Carmel-Anderson, IN	20.1%	24.6%	21.6%	Outstanding	Community	107.4%	87.7%	20.1%

	C	Manhat	Danis			High-	Davile /	Daula /
	Community benchmark	Market benchmark	Bank lending	Final rating	Binding	income borrowers	Bank / community	Bank / market
Virginia Beach-Norfolk-Newport News, VA	13.8%	23.5%	19.4%	Outstanding	Community	141.4%	82.5%	13.8%
Nashville-Davidson-Murfreesboro-Franklin. TN	18.4%	21.2%	19.0%	Outstanding	Community	102.9%	89.6%	18.4%
San Jose-Sunnyvale-Santa Clara, CA	15.7%	8.6%	4.0%	Needs to improve	Market	25.6%	46.9%	15.7%
Milwaukee-Waukesha-West Allis, WI	17.9%	21.4%	19.3%	Outstanding	Community	107.4%	90.0%	17.9%
Jacksonville, FL	18.8%	21.3%	17.9%	High satisfactory	Community	95.1%	84.0%	18.8%
Providence-Warwick, RI-MA	17.0%	25.7%	21.9%	Outstanding	Community	128.9%	85.1%	17.0%
Richmond, VA	18.2%	26.3%	25.3%	Outstanding	Community	139.0%	96.1%	18.2%
Oklahoma City, OK	18.5%	21.9%	19.3%	Outstanding	Community	104.3%	87.9%	18.5%
Birmingham-Hoover, AL	14.2%	22.4%	21.3%	Outstanding	Community	149.6%	95.2%	14.2%
Louisville/Jefferson County, KY-IN	16.2%	24.5%	22.8%	Outstanding	Community	140.5%	93.0%	16.2%
New Orleans-Metairie, LA	16.6%	18.7%	16.3%	High satisfactory	Community	98.5%	87.3%	16.6%
Buffalo-Cheektowaga-Niagara Falls, NY	18.7%	27.2%	27.2%	Outstanding	Community	145.7%	99.9%	18.7%
Hartford-West Hartford-East Hartford, CT	18.2%	28.8%	24.0%	Outstanding	Community	132.2%	83.4%	18.2%
Raleigh, NC	18.0%	22.0%	19.7%	Outstanding	Community	109.5%	89.4%	18.0%
Memphis, TN-MS-AR	18.0%	16.8%	16.2%	High satisfactory	Community	90.0%	96.3%	18.0%
Rochester, NY	19.0%	26.6%	27.0%	Outstanding	Community	142.1%	101.5%	19.0%
Knoxville, TN	18.4%	21.4%	18.1%	High satisfactory	Community	98.3%	84.6%	18.4%
Tucson, AZ	18.8%	18.8%	15.1%	Low satisfactory	Community	80.3%	80.3%	18.8%
Albany-Schenectady-Troy, NY	18.4%	25.9%	22.0%	Outstanding	Community	119.6%	85.1%	18.4%
Albuquerque, NM	16.8%	22.0%	22.2%	Outstanding	Community	132.7%	101.1%	16.8%
Greenville-Anderson-Mauldin, SC	18.6%	22.8%	18.8%	Outstanding	Community	100.7%	82.2%	18.6%
Salt Lake City, UT	19.4%	25.9%	19.6%	Outstanding	Community	101.0%	75.6%	19.4%
Little Rock-North Little Rock-Conway, AR	18.0%	22.2%	21.3%	Outstanding	Community	118.2%	95.7%	18.0%
Omaha-Council Bluffs, NE-IA	18.7%	24.7%	22.9%	Outstanding	Community	122.7%	92.7%	18.7%
Grand Rapids-Wyoming, MI	18.4%	24.9%	22.5%	Outstanding	Community	122.6%	90.6%	18.4%
Bridgeport-Stamford-Norwalk, CT	17.9%	21.4%	15.5%	Low satisfactory	Community	86.8%	72.7%	17.9%

Source: Authors' calculations based on 2015–19 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.

Notes: MSA = metropolitan statistical area. MSAs are listed from most households to least households. The data refer to closed-end loans for one-to-four-unit single-family homes.

TABLE A.6

Total Market Share Lost Using a 1 Percent Market Share Overlay to Retail Lending Assessment Area Triggers

Home mortgages

		Market share	Market share			
	Lost loans	lost banks	lost banks	Banks passing	Banks passing	
	market share	2017	2018	100 loans	both	Lost banks
Ohio	6.5%	7%	7%	10	0	10
Michigan	6.4%	5%	7%	11	2	9
Cincinnati, OH-KY-IN	6.4%	5%	7%	8	1	7
Nashville-DavidsonMurfreesboroFranklin, TN	5.9%	5%	7%	10	0	10
Georgia	4.8%	5%	5%	9	2	7
Columbus, OH	4.8%	5%	5%	7	1	6
Tennessee	4.7%	4%	5%	8	1	7
Charlotte-Concord-Gastonia, NC-SC	4.6%	5%	5%	12	0	12
Memphis, TN-MS-AR	4.5%	5%	4%	5	1	4
New York-Newark-Jersey City, NY-NJ-PA	4.3%	5%	4%	18	1	17
Wisconsin	4.2%	4%	4%	8	1	7
North Carolina	4.1%	4%	4%	8	0	8
Baltimore-Columbia-Towson, MD	3.9%	4%	4%	9	1	8
Chicago-Naperville-Elgin, IL-IN-WI	3.9%	4%	4%	15	0	15
Washington-Arlington-Alexandria, DC-VA-MD-WV	3.7%	4%	4%	15	1	14
Colorado	3.7%	4%	3%	7	2	5
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	3.6%	4%	3%	5	1	4
Dallas-Fort Worth-Arlington, TX	3.6%	4%	3%	13	0	13
Texas	3.5%	4%	4%	6	1	5
Cleveland-Elyria, OH	3.4%	3%	4%	4	0	4
Atlanta-Sandy Springs-Roswell, GA	3.4%	4%	3%	12	0	12
Chattanooga, TN-GA	3.3%	4%	3%	4	1	3
Raleigh, NC	3.2%	3%	3%	5	0	5
Boston-Cambridge-Newton, MA-NH	3.2%	3%	3%	15	1	14
Indianapolis-Carmel-Anderson, IN	2.9%	3%	3%	7	1	6
Oklahoma City, OK	2.9%	3%	3%	6	1	5
Kentucky	2.8%	3%	3%	6	1	5
Grand Rapids-Wyoming, MI	2.7%	2%	4%	2	0	2
Montana	2.6%	3%	2%	5	2	3
Charleston-North Charleston, SC	2.6%	3%	3%	3	0	3
Buffalo-Cheektowaga-Niagara Falls, NY	2.6%	3%	2%	4	1	3
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	2.5%	3%	2%	12	0	12
Providence-Warwick, RI-MA	2.5%	3%	2%	3	0	3
Birmingham-Hoover, AL	2.4%	2%	2%	5	1	4

	Lantina	Market share	Market share	D. d	D l	
	Lost loans market share	lost banks 2017	lost banks 2018	Banks passing 100 loans	Banks passing both	Lost banks
Indiana	2.4%	2%	3%	5	1	4
Detroit-Warren-Dearborn, MI	2.3%	2%	2%	8	1	7
Houston-The Woodlands-Sugar Land, TX	2.3%	3%	2%	11	1	10
Louisville/Jefferson County, KY-IN	2.2%	1%	3%	4	1	3
Akron, OH	2.1%	2%	3%	3	1	2
Los Angeles-Long Beach-Anaheim, CA	2.1%	2%	2%	9	1	8
San Francisco-Oakland-Hayward, CA	2.1%	2%	2%	6	1	5
Mississippi	2.0%	2%	2%	5	3	2
Washington	2.0%	2%	2%	4	2	2
Pittsburgh, PA	2.0%	2%	2%	5	1	4
Greenville-Anderson-Mauldin, SC	2.0%	2%	2%	4	1	3
Knoxville, TN	2.0%	1%	2%	3	1	2
Lexington-Fayette, KY	1.9%	2%	2%	2	0	2
SacramentoRosevilleArden-Arcade, CA	1.9%	2%	2%	4	1	3
Denver-Aurora-Lakewood, CO	1.8%	2%	1%	5	0	5
San Jose-Sunnyvale-Santa Clara, CA	1.8%	2%	2%	3	1	2
Albuquerque, NM	1.8%	2%	2%	2	0	2
Virginia	1.8%	2%	2%	2	0	2
Rochester, NY	1.7%	3%	1%	2	1	1
Phoenix-Mesa-Scottsdale, AZ	1.7%	2%	1%	8	1	7
Missouri	1.6%	2%	2%	5	2	3
Portland-Vancouver-Hillsboro, OR-WA	1.6%	2%	1%	4	0	4
Arkansas	1.6%	2%	1%	4	2	2
Wichita, KS	1.5%	2%	2%	4	2	2
St. Louis, MO-IL	1.5%	2%	1%	4	1	3
Richmond, VA	1.5%	2%	1%	3	0	3
Kansas City, MO-KS	1.5%	1%	1%	6	2	4
Deltona-Daytona Beach-Ormond Beach, FL	1.5%	2%	1%	2	1	1
Virginia Beach-Norfolk-Newport News, VA-NC	1.4%	1%	1%	3	Ō	3
Orlando-Kissimmee-Sanford, FL	1.4%	1%	1%	6	1	5
Palm Bay-Melbourne-Titusville, FL	1.4%	2%	1%	2	1	1
San Antonio-New Braunfels, TX	1.3%	1%	1%	3	0	3
Portland-South Portland, ME	1.3%	2%	1%	1	0	1
Minneapolis-St. Paul-Bloomington, MN-WI	1.3%	1%	1%	6	1	5
Bridgeport-Stamford-Norwalk, CT	1.3%	1%	1%	2	0	2
Tulsa, OK	1.3%	2%	1%	3	2	1
Seattle-Tacoma-Bellevue, WA	1.3%	1%	1%	8	1	7
Worcester, MA-CT	1.3%	2%	1%	1	0	1

	Lost loans	Market share lost banks	Market share lost banks	Banks passing	Banks passing	
	market share	2017	2018	100 loans	both	Lost banks
San Diego-Carlsbad, CA	1.2%	1%	1%	5	1	4
Minnesota	1.2%	1%	1%	6	4	2
New Orleans-Metairie, LA	1.2%	1%	1%	3	1	2
Stockton-Lodi, CA	1.2%	1%	1%	2	1	1
Albany-Schenectady-Troy, NY	1.2%	1%	1%	2	1	1
Jacksonville, FL	1.2%	1%	1%	3	1	2
California	1.2%	1%	1%	3	1	2
Salisbury, MD-DE	1.1%	1%	1%	2	1	1
Cape Coral-Fort Myers, FL	1.1%	2%	1%	2	1	1
Springfield, MO	1.1%	1%	1%	1	0	1
Fort Collins, CO	1.1%	1%	1%	1	0	1
Colorado Springs, CO	1.1%	1%	1%	2	0	2
Austin-Round Rock, TX	1.1%	1%	1%	5	1	4
Vallejo-Fairfield, CA	1.0%	1%	1%	3	2	1
Provo-Orem, UT	1.0%	1%	1%	1	0	1
Omaha-Council Bluffs, NE-IA	1.0%	1%	1%	2	1	1
Asheville, NC	1.0%	1%	1%	1	0	1
Salt Lake City, UT	0.9%	1%	1%	1	0	1
Miami-Fort Lauderdale-West Palm Beach, FL	0.9%	1%	1%	5	1	4
Tampa-St. Petersburg-Clearwater, FL	0.9%	1%	1%	5	1	4
Huntsville, AL	0.9%	1%	1%	1	0	1
Hartford-West Hartford-East Hartford, CT	0.9%	1%	1%	2	1	1
Reno, NV	0.9%	1%	1%	1	0	1
Milwaukee-Waukesha-West Allis, WI	0.9%	1%	1%	2	0	2
Pennsylvania	0.9%	1%	1%	2	1	1
Oklahoma	0.8%	1%	1%	3	2	1
Greensboro-High Point, NC	0.8%	1%	1%	1	0	1
lowa	0.8%	1%	1%	2	1	1
Riverside-San Bernardino-Ontario, CA	0.8%	1%	1%	6	0	6
Ogden-Clearfield, UT	0.8%	1%	1%	1	0	1
Oregon	0.8%	1%	1%	4	3	1
Des Moines-West Des Moines, IA	0.7%	1%	1%	1	0	1
Alabama	0.7%	1%	1%	3	2	1
Oxnard-Thousand Oaks-Ventura, CA	0.7%	1%	1%	2	1	1
Illinois	0.6%	1%	1%	3	2	1
New York	0.6%	1%	1%	2	1	1

Source: Urban Institute calculations from 2017 and 2018 Home Mortgage Disclosure Act data and 2017 and 2018 Federal Financial Institutions Examination Council data.

TABLE A.7

Total Market Share Lost Using a 1 Percent Market Share Overlay to Retail Lending Assessment Area Triggers

Small business

	Lost loans market share	Market share lost banks 2017	Market share lost banks 2018	Banks passing 100 loans	Banks passing both	Lost banks
Chicago-Naperville-Elgin, IL-IN-WI	5.4%	5.7%	5.1%	13	0	13
Minneapolis-St. Paul-Bloomington, MN-WI	4.0%	4.2%	3.9%	8	2	6
Atlanta-Sandy Springs-Roswell, GA	3.6%	3.6%	3.6%	10	3	7
Detroit-Warren-Dearborn, MI	2.9%	2.8%	3.0%	8	3	5
Miami-Fort Lauderdale-West Palm Beach, FL	2.8%	2.5%	3.1%	8	2	6
Baltimore-Columbia-Towson, MD	2.3%	1.2%	3.2%	5	3	2
Kansas City, MO-KS	2.0%	1.7%	2.3%	5	3	2
Indianapolis-Carmel-Anderson, IN	1.9%	2.1%	1.8%	5	3	2
Los Angeles-Long Beach-Anaheim, CA	1.9%	1.9%	1.9%	7	1	6
Texas	1.8%	1.6%	2.1%	9	7	2
Orlando-Kissimmee-Sanford, FL	1.8%	1.9%	1.8%	6	3	3
Tampa-St. Petersburg-Clearwater, FL	1.8%	1.8%	1.8%	6	3	3
San Diego-Carlsbad, CA	1.7%	1.8%	1.6%	3	1	2
New York-Newark-Jersey City, NY-NJ-PA	1.6%	1.7%	1.6%	16	5	11
Boston-Cambridge-Newton, MA-NH	1.6%	1.6%	1.5%	11	7	4
Dallas-Fort Worth-Arlington, TX	1.5%	1.3%	1.6%	8	4	4
San Francisco-Oakland-Hayward, CA	1.3%	1.3%	1.4%	4	1	3
SacramentoRosevilleArden-Arcade, CA	1.3%	1.1%	1.4%	5	3	2
Houston-The Woodlands-Sugar Land, TX	1.2%	1.0%	1.3%	7	4	3
Phoenix-Mesa-Scottsdale, AZ	1.2%	1.3%	1.1%	4	2	2
Washington-Arlington-Alexandria, DC-VA-MD-WV	1.2%	1.2%	1.2%	8	4	4
Cincinnati, OH-KY-IN	1.2%	1.0%	1.4%	3	2	1
Seattle-Tacoma-Bellevue, WA	1.1%	0.9%	1.3%	4	2	2
Riverside-San Bernardino-Ontario, CA	1.1%	0.9%	1.2%	4	2	2
North Carolina	1.0%	0.9%	1.1%	6	5	1
Providence-Warwick, RI-MA	1.0%	1.0%	1.0%	8	7	1
Nashville-DavidsonMurfreesboroFranklin, TN	0.9%	0.9%	1.0%	4	3	1
Columbus, OH	0.8%	0.8%	0.7%	3	2	1
Cleveland-Elyria, OH	0.8%	0.8%	0.7%	4	3	1
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	0.7%	0.7%	0.8%	8	6	2

	Lost loans market share	Market share lost banks 2017	Market share lost banks 2018	Banks passing 100 loans	Banks passing both	Lost banks
St. Louis, MO-IL	0.7%	0.7%	0.8%	6	5	1
Pittsburgh, PA	0.7%	0.7%	0.8%	6	5	1
Austin-Round Rock, TX	0.7%	0.8%	0.6%	4	3	1
San Jose-Sunnyvale-Santa Clara, CA	0.6%	0.7%	0.6%	2	1	1
Denver-Aurora-Lakewood, CO	0.4%	0.4%	0.4%	3	2	1

Source: Urban Institute calculations from 2017 and 2018 Federal Financial Institutions Examination Council data.

Notes

- ¹ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 33888.
- ² 12 USC 2901(a).
- 3 12 USC 2903(a)(1).
- ⁴ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022).
- ⁵ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 33933.
- ⁶ Linna Zhu, Laurie Goodman, and Jun Zhu, "The Community Reinvestment Act Meant to Combat Redlining's Effects. 45 Years Later, Black Homebuyers Are Still Significantly Underserved," *Urban Wire* (blog), Urban Institute, March 24, 2022, https://www.urban.org/urban-wire/community-reinvestment-act-meant-combat-redlinings-effects-45-years-later-black.
- ⁷ The NPR proposes to include HMDA data in public evaluations under the CRA for this purpose, although the NPR also states this information "would have no direct impact on the conclusions or ratings of the bank" (87 Fed. Reg. 34003).
- ⁸ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 34047.
- ⁹ For each MSA, for each of the four relevant categories—low-income and moderate-income neighborhoods and low-income and moderate-income borrowers—we determined the community and the market benchmarks. We then applied the defined multipliers on table 8 to section __.22 (87 Fed. Reg. 33943) to calculate the calibrated community and market benchmarks. To determine the threshold for each of our categories, we selected the lesser of the two calibrated benchmarks. We then compared bank lending with the threshold in each catagory to determine the final performance rating. We also observed which calibrated benchmark was lower in the final conclusion category and was therefore, under the NPR, binding.
- Authors' calculations based on 2019 American Community Survey data and 2018–19 Home Mortgage Disclosure Act data.
- ¹¹ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 33928-29.
- We do not explicitly show loans that are neither purchase nor refinance. This "other" category, which includes renovation loans, is about 3.5 percent of total originations; these loans are included in the calculation of the percentages in the text.
- ¹³ It is possible that some of these loans are made to low- and moderate-income borrowers, but because many of the loans are made to nonnatural persons (e.g., corporations, partnerships, and trusts) and thus are missing borrower income information, this is difficult to evaluate.
- ¹⁴ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 33929.
- ¹⁵ The community benchmark is the share of multifamily units in low-income census tracts or moderate-income census tracts, as applicable, from ACS data. The market benchmark is the share of multifamily mortgage lending by all HMDA reporters in low-income census tracts or moderate-income census tracts in assessment areas, as applicable.
- ¹⁶ Although banks submit information to regulators on the number of units supported by each multifamily loan, public HMDA disclosure divides multifamily buildings into five broad categories: 5 to 24 units, 25 to 49 units, 50 to 99 units, 100 to 149 units, and at least 150 units, making it hard for users to see how many units have actually received financing.
- ¹⁷ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 33894ff.

NOTES 41

- ¹⁸ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 33898.
- ¹⁹ Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 33918ff.
- ²⁰ We started our analysis by attempting to replicate table 1 to section __.17 in the NPR (87 Fed. Reg. 33920) and were able to come reasonably close to the NPR analysis. We consulted with the Federal Reserve staff. The difference between our results and the results in the NPR are caused by the constraints of the public data. The Federal Reserve based its analysis on 2019 facility-based assessment areas and used the same areas for prior years. We could not realign the 2017 and 2018 results with the 2019 results.
- ²¹ See Small Business Lending Data Collection under the Equal Credit Opportunity Act (Regulation B), 86 Fed. Reg. 56356 (Oct. 8, 2021). This assumes the CFPB's proposed definition is adopted.
- ²² Community Reinvestment Act, 87 Fed. Reg. 33884 (Jun. 3, 2022), 33966.
- ²³ "§1002.8 Special Purpose Credit Programs," Consumer Financial Protection Bureau, accessed July 27, 2022, https://www.consumerfinance.gov/rules-policy/regulations/1002/8/.
- ²⁴ Equal Credit Opportunity (Regulation B): Special Purpose Credit Programs, 86 Fed. Reg. 3762 (Jan. 15, 2021), 3763.
- 25 See the website for the Special Purpose Credit Programs Toolkit for Mortgage Lenders at https://spcptoolkit.com/.
- Laurie Goodman, John Walsh, and Jun Zhu, "Concentration in Multifamily Lending Argues for Full Public Release of More HMDA Data," *Urban Wire* (blog), Urban Institute, April 5, 2019, https://www.urban.org/urban-wire/concentration-multifamily-lending-argues-full-public-release-more-hmda-data.

42 NOTES

References

Goodman, Laurie, Ellen Seidman, and Jun Zhu. 2022. *Bank Lending outside CRA Assessment Areas*. Washington, DC: Urban Institute.

Goodman, Laurie, Linna Zhu, Ellen Seidman, Janneke Ratcliffe, and Jun Zhu. 2021. *Should the Community Reinvestment Act Consider Race?* Washington, DC: Urban Institute.

Goodman, Laurie, Jun Zhu, and John Walsh. 2019. *The Community Reinvestment Act: What Do We Know, and What Do We Need to Know?* Working paper. Washington, DC: Urban Institute.

Theodos, Brett. 2021. "Small Business in the US: Strengths and Opportunities for Growth." Statement before the House Select Committee on Economic Disparity and Fairness in Growth, Washington, DC, March 16.

REFERENCES 43

About the Authors

Laurie Goodman is an Institute fellow and founder of the Housing Finance Policy Center at the Urban Institute. The center provides policymakers with data-driven analyses of housing finance policy issues that they can depend on for relevance, accuracy, and independence. Before joining Urban, Goodman spent 30 years as an analyst and research department manager at several Wall Street firms. From 2008 to 2013, she was a senior managing director at Amherst Securities Group LP, a boutique broker-dealer specializing in securitized products, where her strategy effort became known for its analysis of housing policy issues. From 1993 to 2008, Goodman was head of global fixed income research and manager of US securitized products research at UBS and predecessor firms, which were ranked first by *Institutional Investor* for 11 straight years. Before that, she held research and portfolio management positions at several Wall Street firms. She began her career as a senior economist at the Federal Reserve Bank of New York. Goodman was inducted into the Fixed Income Analysts Hall of Fame in 2009. Goodman serves on the board of directors of MFA Financial, Arch Capital Group Ltd., and Home Point Capital Inc., and is a consultant to the Amherst Group. She has published more than 200 journal articles and has coauthored and coedited five books. Goodman has a BA in mathematics from the University of Pennsylvania and an AM and PhD in economics from Stanford University.

Linna Zhu is a research associate in the Housing Finance Policy Center at the Urban Institute. She conducts data-driven quantitative research on policy issues related to US mortgage finance, housing supply, and racial inequality. Zhu has published research articles on such topics as the Community Reinvestment Act, automated valuation models, artificial intelligence risk management, Asian American and Pacific Islander mortgage denial rates, small-dollar loans, housing supply, and local planning responses, aging in place, and household finances among older Americans. Her research has been published in leading academic and policy journals, such as *Regional Science and Urban Economics* and *Cityscape*. Zhu holds a BA in economics from Renmin University of China, an MS in finance from Johns Hopkins University, and a PhD in public policy and management from the University of Southern California.

Jun Zhu is a visiting assistant professor in the finance department at Indiana University–Bloomington and a nonresident fellow in the Housing Finance Policy Center. Previously, she was a principal research associate in the Housing Finance Policy Center, where she provided timely and rigorous data-driven research on key housing policy issues, designed and conducted quantitative studies of the housing

44 ABOUT THE AUTHORS

finance market, and manages and explores housing and mortgage databases. Before that, Zhu was a senior economist in the Office of the Chief Economist at Freddie Mac, where she conducted research on mortgage and housing topics, including default, prepayment, and house price appreciation. While at Freddie Mac, she was a consultant to the US Department of the Treasury. Zhu has published more than 50 research articles on the financial crisis and the GSEs, mortgage refinance and modification, mortgage default and prepayment, housing affordability and credit availability, and affordable housing and access to homeownership. Her research has been published in leading real estate and finance academic and professional journals, such as *Real Estate Economics*, the *Journal of Real Estate Finance and Economics*, and the *Journal of Fixed Income*. Zhu holds a BS in real estate with a minor in computer science from Huazhong University of Science and Technology, an MS in real estate from Tsinghua University, and a PhD in real estate with a minor in economics from the University of Wisconsin–Madison.

Ellen Seidman is a nonresident fellow in the Housing Finance Policy Center. From 2012 to 2016, Seidman served on the inaugural Consumer Advisory Board of the Consumer Financial Protection Bureau. From 2012 to 2014, she was a visiting scholar at the Federal Reserve Bank of San Francisco, where she edited Investing in What Works for America's Communities; What Counts: Harnessing Data for America's Communities; and What It's Worth: Strengthening the Financial Future of Families, Communities, and the Nation. From 2002 to 2010, Seidman held various positions at ShoreBank Corporation. She was senior counsel to the Democratic staff of the House Financial Services Committee, was special assistant to the president for economic policy, and held senior positions at Fannie Mae and the US Departments of Transportation and the Treasury. From 1997 to 2001, she was director of the Office of Thrift Supervision and sat on the boards of the Federal Deposit Insurance Corporation and NeighborWorks America. She serves on the boards of the Financial Health Network, Maine Initiatives, and Friends of the Strand Theatre. Seidman received an AB from Radcliffe College, an MBA from the George Washington University, and a JD from Georgetown University.

John Walsh is a research analyst in the Housing Finance Policy Center. Before joining Urban, he interned with the US Department of Housing and Urban Development in the financial management division. Walsh graduated from Indiana University's School of Public and Environmental Affairs with a degree in policy analysis, a minor in economics, and a certificate in applied research and inquiry. As a senior, he coauthored his thesis on the Community Reinvestment Act and its impact on mortgage outcomes during the 2008 economic recession.

ABOUT THE AUTHORS 45

Janneke Ratcliffe is vice president for housing finance policy at the Urban Institute. She joins the Housing Finance Policy Center's leadership team to manage execution of the center's mission. Over a career that spans industry, the nonprofit sector, academic research, and the federal government, her work focuses on increasing access to financial systems that foster economic security and prosperity. Ratcliffe came to Urban from the Consumer Financial Protection Bureau, where she served as assistant director, leading its Office of Financial Education. Previously, she was the executive director of the University of North Carolina Center for Community Capital, leading "transformative research on how mortgage markets and financial services can better promote financial security and economic opportunity." Ratcliffe has also served at GE Capital Mortgage, the Center for American Progress, and Self-Help, where she was instrumental in high-impact programs in affordable and Community Reinvestment Act mortgages and community development finance. Ratcliffe serves on the Consumer Affairs Advisory Council of the Mortgage Bankers Association, and she is a member of the National Community Stabilization Trust Board of Managers. She is a graduate of the University of North Carolina at Chapel Hill, where she studied economics and French.

46 ABOUT THE AUTHORS

STATEMENT OF INDEPENDENCE

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.



500 L'Enfant Plaza SW Washington, DC 20024

www.urban.org